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Кафедра «Иностранные языки»

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Английский язык
для студентов в заочной форме обучения
технических направлений подготовки

Учебное пособие

20

НАУЧНО-ТЕХНИЧЕСКАЯ БИБЛИОТЕКА
УНИВЕРСИТЕТ МАШИНОСТРОЕНИЯ
УЧЕБНЫЙ ФОНД

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Данное учебное пособие составлено в соответствии с модульной системой обучения и включает 7 модулей, грамматические пояснения, англо-русский словарь контекстуальных значений активной лексики. Первый модуль представляет собой диагностический тест. Модули (2-6) содержат тексты для развития умений и навыков чтения, аннотирования и реферирования, причем система упражнений является одинаковой для этих модулей. Седьмой модуль посвящен основам делового английского языка.

Учебное пособие разработано в соответствии с ФГОС ВПО для студентов заочной формы обучения технических направлений подготовки.

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MODULE 1. ДИАГНОСТИЧЕСКИЙ ТЕСТ

Замените слова, написанные курсивом, местоимениями.

1. *My uncle* is a carpenter.
a) She b) I c) He d) His
2. *His daughter* is a musician.
a) She b) He c) Her d) It
3. *Their aunt* is a manager.
a) He b) She c) They d) Her
4. *Our parents* are physicians.
a) He b) We c) They d) Our
5. *My grandfather and grandmother* are pensioners.
a) My b) They c) She d) He

Выберите подходящие формы глаголов.

6. His uncle (to be) a fitter.
a) are b) is c) am d) to be
7. My aunt (to have) those books.
a) have b) to have c) has
8. I (to be) his cousin.
a) is b) are c) am d) to be
9. Their friends (to be) students.
a) is b) are c) to be d) am
10. His son (to have) this article.
a) has b) have c) to have

Выберите правильные формы множественного числа.

11. Their friend is a dentist.
a) Their friends were dentists.
b) Their friends are dentists.
c) Their friend was a dentist.
d) Their friends is dentists.
12. That was an article.
a) That was articles.
b) Those was articles.
c) Those were articles.
d) These were articles.
13. This is a clip.
a) Those were clips.
b) Those are clips.
c) These are clips.
d) This are clips.
14. He was a teacher.

- a) They were teachers.
 - b) They are teachers.
 - c) We are teachers.
 - d) You are teachers.
15. Your daughter is a pupil.
- a) Their daughter is a pupil.
 - b) Your daughters are pupils.
 - c) Your daughters are a pupil.
 - d) Their daughters are pupil.

Выберите подходящие местоимения.

16. My friends have ... discs.
- a) this b) that c) these d) me
17. ... were students.
- a) We b) I c) This d) That
18. This is my notebook, and that is
- a) hers b) your c) you d) me
19. ... grandparents are pensioners.
- a) Me b) Mine c) My d) Hers
20. ... are my pencils.
- a) That b) These c) This d) We

Выберите подходящий перевод предложений.

21. У них есть мои кассеты.
- a) They had my cassettes.
 - b) They have mine cassettes.
 - c) They have my cassettes.
 - d) They has my cassettes.
22. Мой дядя был музыкантом.
- a) My uncle is a musician.
 - b) My aunt was a musician.
 - c) My uncle was a musician.
 - d) My uncle were a musician.
23. Её брат – бизнесмен.
- a) Her brother is a businessman.
 - b) Her brother was a businessman.
 - c) His brother is a businessman.
 - d) His brother was a businessman.
24. У меня был их диск.
- a) I had their disc.
 - b) I have their disc.
 - c) I has their disc.
 - d) I had this disc.
25. У него есть эта статья.

- a) She has that article.
- b) He has this article.
- c) She has this article.
- d) He has that article.

Выберите подходящие формы множественного числа.

- 26. There is a goose in the kitchen.
 - a) There is geese in the kitchen.
 - b) There are gooses in the kitchen.
 - c) There are geese in the kitchen.
 - d) There were geese in the kitchen.
- 27. There is a shelf on the wall.
 - a) There are shelves on the wall.
 - b) There were shelves on the wall.
 - c) There are shelves on the wall.
 - d) There was a shelf on the wall.
- 28. There is a boy in the room.
 - a) There was a boy in the room.
 - b) There were boys in the room.
 - c) There are boies in the room.
 - d) There are boys in the room.
- 29. There was a flower in the vase.
 - a) There were flowers in the vase.
 - b) There are flowers in the vase.
 - c) There is a flower in the vase.
 - d) There are a flower in the vase.
- 30. There was a window in the room.
 - a) There is a window in the room.
 - b) There were windows in the room.
 - c) There are windows in the room.
 - d) There are window in the room.

Выберите правильные формы единственного числа.

- 31. There were magazines under the table.
 - a) There is a magazine under the table.
 - b) There was magazine under the table.
 - c) There was a magazine under the table.
 - d) There is magazine under the table.
- 32. There are teachers in the room.
 - a) There were teachers in the room.
 - b) There was a teacher in the room.
 - c) There is a teacher in the room.
 - d) There is an teacher in the room.
- 33. There are some words in this sentence.

- a) There were some words in this sentence.
 - b) There is a word in this sentence.
 - c) There was a word in this sentence.
 - d) There is a word in that sentence.
34. There were some titles above the text.
- a) There was a title above the text.
 - b) There are titles above the text.
 - c) There is a title above the text.
 - d) There is title above the text.
35. There are discs near the computer.
- a) There is a disc near the computer.
 - b) There was a disc near the computer.
 - c) There is disc near the computer.
 - d) There is a disc in the computer.

Вставьте вместо пропусков правильные формы глагола to be.

36. There _____ paragraphs in the text.
- a) is b) was c) have d) are
37. There _____ pupils in the room.
- a) are b) was c) have d) is
38. My brother's book _____ in this bookcase.
- a) was b) are c) were d) has
39. There _____ a ruler behind the wardrobe.
- a) be b) is c) were d) are
40. His daughter's bag _____ on the shelf.
- a) was b) are c) be d) were

Выберите правильный перевод предложений.

41. Мамино кресло стоит в углу.
- a) There is an armchair in the corner.
 - b) The mother's armchair is in the corner.
 - c) The mother's armchair in the corner.
 - d) There was the mother's armchair in the corner.
42. Ваза - на подоконнике.
- a) There was a vase on the window sill.
 - b) There is a vase on the window sill.
 - c) The vase is on the window sill.
 - d) The vase was on the window sill.
43. Словарь - в книжном шкафу.
- a) The dictionary was in the bookcase.
 - b) The dictionary is in the bookcase.
 - c) There is a dictionary in the bookcase.
 - d) There was a dictionary in the bookcase.
44. В посудном шкафу - тарелки и кастрюли.

- a) There are plates and pans in the cupboard.
 - b) There were plates and pans in the cupboard.
 - c) There is plates and pans in the cupboard.
 - d) There was plates and pans in the cupboard.
45. В тексте — несколько абзацев.
- a) There were some paragraphs in the text.
 - b) There are some paragraphs in the text.
 - c) Some paragraphs are in the text.
 - d) Some paragraphs in the text.

Выберите правильный перевод словосочетаний.

46. Бабушкин холодильник.
- a) the grandfather's fridge;
 - b) the grandmother's fridge;
 - c) the grandmother's fridges.
47. Картина моего двоюродного брата.
- a) my cousins' picture;
 - b) mine cousin's picture;
 - c) my cousin's picture.
48. Оценки моей сестры.
- a) mine sister's marks;
 - b) my sister's marks;
 - c) my sister's mark.
49. Статья её отца.
- a) her fathers' article;
 - b) her father's article;
 - c) her father's articles.
50. Диски её друга.
- a) her friends' discs;
 - b) her friend's disc;
 - c) her friend's discs.

Выберите правильные формы степеней сравнения.

51. sad
- a) sad – sadder – (the) most sad;
 - b) sad – sadder – (the) saddest;
 - c) sad – more sad – (the) most sad;
 - d) sad – more sad – (the) saddest;
52. fine
- a) fine – more fine – (the) finest;
 - b) fine – finer – (the) fineest;
 - c) fine – finer – (the) finest;
 - d) fine – more fine – (the) most finest;
53. old

- a) old – older – (the) oldest;
- b) old – more older – (the) oldest;
- c) old – older – (the) most oldest;
- d) old – more older – (the) most oldest;

54. young

- a) young – more younger – (the) most youngest;
- b) young – younger – (the) most youngest;
- c) young – more younger – (the) youngest;
- d) young – younger – (the) youngest;

55. bad

- a) bad – more bad – (the) most bad;
- b) bad – better – (the) most bad;
- c) bad – worse – the worst;
- d) bad – more bad – (the) best.

Раскройте скобки и выберите правильные предложения.

56. This flat is (small) than ours.

- a) This flat is the smallest than ours.
- b) This flat is smaller than ours.
- c) This flat is more small than ours.
- d) This flat is more smaller than ours.

57. This text is (difficult) than that one.

- a) This text is more difficulter than that one.
- b) This text is difficulter than that one.
- c) This text is most difficult than that one.
- d) This text is more difficult than that one.

58. This duster is (dirty) than that one.

- a) This duster is dirtier than that one.
- b) This duster is most dirty than that one.
- c) This duster is the most dirty than that one.
- d) This duster is more dirtier than that one.

59. This article is (necessary) one.

- a) This article is the most necessary one.
- b) This article is the more necessary.
- c) This article is most necessary one.
- d) This article is necessary one.

60. This magazine is (good) one.

- a) This magazine is gooder one.
- b) This magazine is more best one.
- c) This magazine is the most best one.
- d) This magazine is the best one.

Выберите правильный перевод предложений.

61. Твоя комната холоднее, чем моя.

- d) The grandmother may rest in the garden.
78. Мне разрешили войти в комнату.
- a) I am allowed to come into the room.
 - b) I was allowed to come into the room.
 - c) I am able to come into the room.
 - d) I am allowed to come into the room.
79. Этот студент должен ответить на вопросы из этого упражнения.
- a) This student must answer the questions from this exercise.
 - b) This student can answer the questions from this exercise.
 - c) This student is allowed to answer the questions from this exercise.
 - d) This student may answer the questions from this exercise.
80. Ему разрешили посмотреть телевизор в той комнате.
- a) He is allowed to watch TV in that room.
 - b) He was allowed to watch TV in that room.
 - c) He was allowed to watch TV in this room.
 - d) He were allowed to watch TV in this room.

MODULE 2. HIGHER EDUCATION

Exercise 1. Read and guess the meanings of the new words. If you have some difficulties use the dictionary at the end of this book.

- 1) *mechanical engineering*. Moscow State University of Mechanical Engineering has a long history.
- 2) *vocational school*. It was a small vocational school.
- 3) *to turn into*. Later that small vocational school turned into one of the leading secondary school in Russia.
- 4) *to influence*. The activities of that school influenced the establishment and improvement of vocational education in Russia.
- 5) *educational institution*. Schools, colleges and universities are educational institutions.
- 6) *research centres*. The university is training students for machine-building plants, research centres, etc.
- 7) *full-time, part-time, extra-mural departments*. The university has full-time, part-time, extra-mural departments.
- 8) *teaching staff*. The teaching staff of the university consists of highly-qualified specialists.
- 9) *educational aids*. The teachers have created a lot of educational aids.
- 10) *abroad*. The educational aids which have been created by the university teachers are used in higher schools not only in Russia but abroad too.
- 11) *to take part*. The university takes part in the activities of some governmental and international professional public organizations.
- 12) *scientific*. A lot of scientific conferences are organized on the base of the university.

Exercise 2. Read the international words and mind the stress.

University, history, activity, institute, student, machine, centre, specialist, academician, academy, professor, candidate, doctor, organization, conference, base.

Exercise 3. Read the sentences, point out the Simple, Continuous, and Perfect Tenses. Give the Russian equivalents. If you have some difficulties use the grammar reference at the end of the book.

1. The university has a long history.
2. He is sitting at the lesson now.
3. The teaching staff of the university consists of highly-educated specialists.
4. Tomorrow he will take an exam.
5. He is watching TV at the moment.
6. The students are being taught different skills.
7. They have already received the instructions.
8. The devices have been tested by the students.
9. He was visiting the museum from 4 till 6 o'clock yesterday.
10. The students will be attending classes all the term.

Exercise 4. Make up your own sentences according to the models.

Model A: *She often writes e-mails.*

E-mails are often written by her.

1. He always learns different skills. 2. This student usually answers questions very well. 3. She always attends English classes. 4. He usually receives the instructions from his chief. 5. As a rule, the teacher solves the problems together with the students.

Model B: *He was visiting the exhibition the whole morning yesterday.*

The exhibition was being visited by him the whole morning yesterday.

1. The family was watching TV from 9 till 11 o'clock yesterday. 2. The whole morning yesterday she was translating the article. 3. Last month he was buying the newspapers at that newsstand. 4. The student was reading a book all evening yesterday. 5. She was writing an article during 3 hours yesterday.

Exercise 5. Read the text and choose the most suitable heading given below for each paragraph.

- 1) The Teaching Staff and Students
- 2) The University Activities
- 3) From the History of the University

MOSCOW STATE UNIVERSITY OF MECHANICAL ENGINEERING

Moscow State University of Mechanical Engineering has a long history. In 1865 it was a small vocational school. Later it turned into one of the leading secondary schools in Russia. The activities of that school influenced the establishment and improvement of vocational education in Russia. And in 1939 it was founded as Moscow Auto-Mechanical Institute (MAMI).

Today this educational institution is one of the largest technical higher schools in Russia. It is training students for machine-building plants, research centres, etc. It has full-time, part-time, and extra-mural departments. The teaching staff of the university consists of highly-qualified specialists including academicians and corresponding members of the Russian Academy of Sciences, professors, associate professors, Candidates of Sciences and Doctors of Sciences.

The university professors and teachers have created a lot of educational aids that are used not only in the university but also in other higher schools in Russia and abroad. The university takes part in the activities of some governmental and international professional public organizations. A lot of scientific conferences are organized on the base of the university.

Exercise 6. Share your vision about Moscow State University of Mechanical Engineering using the following phrases: in my opinion, if I am not mistaken, as far as I remember, etc.

1. What facts from the history of Moscow State University of Mechanical Engineering can you name?

2. What does the university train students for?
3. What departments are there in the university?
4. Whom does the teaching staff of the university consist of?
5. Where are the university educational aids used?
6. In what activities does the university take part?

Exercise 7. Complete logically the following sentences.

1. In 1865 Moscow State University of Mechanical Engineering was
2. It turned into
3. The activities of that school influenced
4. In 1939 it was founded as
5. Today this educational institution is
6. It is training
7. The teaching staff of the university consists of
8. The university professors and teachers have created
9. The educational aids are used
10. The university takes part in

Exercise 8. Translate the following sentences from Russian into English. You will have a story on the topic as a pattern.

1. Московский государственный машиностроительный университет имеет длинную историю. 2. Сначала это была маленькая профессиональная школа, которая позже превратилась в ведущую среднюю школу России. 3. Московский Автомеханический институт (МАМИ) был основан в 1939 году. 4. В настоящее время университет готовит студентов для машиностроительных заводов и исследовательских центров. 5. В университете есть дневное, вечернее и заочное отделения. 6. Профессорско-преподавательский состав университета состоит из высококвалифицированных специалистов: академиков, членов-корреспондентов Российской академии наук, профессоров, доцентов. 7. В университете создано много дидактических средств, которые используются не только в высших учебных заведениях России, но и за рубежом. 8. На базе университета проводятся многочисленные научно-технические конференции.

Exercise 9. Read and give a summary of the text.

BRITISH UNIVERSITIES

There are about 50 universities in the United Kingdom of Great Britain and Northern Ireland. The education at the universities is not free but the competition among those who want to be a student is serious.

British universities differ greatly from each other in history, traditions, and methods of instructions. The most famous universities are Oxford and Cambridge Universities. Each of them is a federation of colleges. Each college is governed by

their own teaching staff. It is responsible for teaching students through the tutorial system: a college tutor advises students which lectures to attend, and lecture attendance at the universities is not compulsory.

Cambridge University is a great centre of research. Cavendish scientific laboratory is known all over the world. Some Nobel Prize scientists worked there. Thomson, Rutherford, P.Kapitza were among them.

Exercise 10. Compile information about some universities in the UK and USA and participate in a project. You may use the following web site:
www.topuniversities.com/university-rankings

TEST 1

1. Choose the proper words and fill in the blanks.

1. We were discussing educational systems in different ...
 A universities B activities C students D plants
2. The university has full-time, part-time, and ... departments.
 A mural B extra-mural C vocational D secondary
3. It ... into a leading secondary school.
 A influenced B consisted C turned D created
4. It ... the development of education in this country.
 A influenced B consisted C turned D created
5. They ... different educational aids.
 A influenced B consisted C turned D created
6. It ... of some departments then.
 A influenced B consisted C turned D created
7. This university is one of the largest ... higher schools in Russia.
 A highly-qualified B training C technical D educational
8. The university prepares students for ...
 A schools B research centres C departments D activities
9. The university ... part in the activities of international organizations.
 A takes B turns C creates D consists
10. They are used not only in Russia but ...
 A then B also C a lot of D abroad

2. Fill in the blanks with the proper grammatical forms.

1. He ... this museum the whole morning yesterday.
 A were visiting B was being visited C was visiting D being visited
2. They ... an e-mail two days ago.
 A are being written B is writing C was writing D wrote
3. He usually ... the texts very well.
 A were translating B is translated C translate D translates
4. This material ... in the article.

- A** is being used **B** use **C** uses **D** were being used
5. *At present she ... here.*
A were studying **B** study **C** is studying **D** is being studied
6. *The students ... these lectures next week.*
A will attend **B** will attending **C** attends **D** will be
7. *The boys ... this newspaper yesterday.*
A read **B** are reading **C** was reading **D** were being read
8. *The questions ... by the relatives now.*
A were being asked **B** being asked **C** was asked **D** are being asked
9. *You ... these questions.*
A was answered **B** is answered **C** will answer **D** was answering
10. *The text about education ... by the students tomorrow.*
A were being read **B** read **C** will be read **D** will read

MODULE 3. ENGINEERING MATERIALS

Exercise 1. Read and guess the meanings of the new words. If you have some difficulties use the dictionary at the end of this book.

- 1) *access*. The earliest humans had an access to a very limited number of materials.
- 2) *property*. A lot of materials with specialized properties were produced.
- 3) *to encompass*. Material science encompasses various classes of materials.
- 4) *alloy*. Metallic materials include metals and alloys.
- 5) *ferrous metals*. Metallic materials which contain iron are called ferrous metals.
- 6) *non-ferrous metals*. Metallic materials which do not contain iron are called non-ferrous metals.
- 7) *cast iron*. The most common ferrous metals are cast iron and steel.
- 8) *to influence*. Different elements in alloys influence properties of materials.
- 9) *brittleness*. Large amount of carbon in cast iron increases its brittleness.
- 10) *to rust*. Steel containing nickel or chromium does not rust.
- 11) *tungsten*. Steels which contain tungsten or cobalt are extremely hard.
- 12) *copper*. Aluminium and copper are widely used.
- 13) *ductile, malleable*. Copper is a ductile and malleable metal.
- 14) *frequent*. Copper is a frequent element of various metal alloys.
- 15) *brass, tin, lead*. Brass contains copper and zinc, bronze contains copper and tin/lead.
- 16) *representative*. Polymers are representatives of non-metallic materials.
- 17) *rubber*. One of the best known natural polymers is rubber.
- 18) *thermoplastics, thermosets*. Plastics can be divided into thermoplastics and thermosets.
- 19) *to mould*. Thermoplastics can be heated and moulded numerous times.
- 20) *indispensable*. The properties of plastics are indispensable.
- 21) *flexible*. Plastics are flexible.
- 22) *relevantly*. Plastics are relevantly cheap.
- 23) *subsequent cooling*. Ceramic materials are formed by the action of heat and subsequent cooling.
- 24) *clay*. Clay was one of the earliest materials used to produce ceramics.
- 25) *stiff*. Ceramics tend to be strong, stiff, brittle, and chemically inert.
- 26) *to vary*. Ceramics properties vary widely.
- 27) *insulator*. Porcelain is widely used to make electrical insulators.
- 28) *available*. A lot of engineering materials are available to engineer.
- 29) *to choose*. Engineers have to choose the engineering materials.
- 30) *purpose*. The engineering materials should be chosen for the given purpose.

Exercise 2. Read the international words, mind the stress.

Material, role, civilization, natural, technology, class, traditional, group, metal, polymer, ceramics, nickel, cobalt, aluminium, structure, component, corrosion, thermal, electrical, element, zinc, bronze, polymer, synthetic, plastic, category, industry, product, form, element, reaction.

Exercise 3. Read the sentences, point out the Verbals: Infinitive, Gerund, Participle I, Participle II. Give the Russian equivalents. If you have some difficulties use the grammar reference at the end of the book.

1. Metallic materials containing iron are called non-ferrous metals. 2. Clay being one of the earliest materials was used to produce ceramics. 3. The engineers have changed the technological process of producing this material without using this scheme. 4. While describing alloys it is possible to use the term 'metals'. 5. The engineer has to choose the material best suited to serve the given purpose.

Exercise 4. Make up your own sentences with the Verbals according to the models.

Model A: Materials which can be used in this production process are usually metals.

Materials to be used in this production process are usually metals.

Materials used in this production process are usually metals.

1. Thermoplastics which can be heated numerous times are available of different types. 2. Plastics which can be divided into thermoplastics and thermosets are representatives of non-metallic materials. 3. Civilizations which are named by the level of their material development are the Stone Age, the Bronze Age, and the Iron Age.

Model B: To produce new materials is very important.

Producing new materials is very important.

1. To use the term 'metals' is possible. 2. To choose the material for the production process is not easy. 3. To mould thermoplastics is common in the production processes.

Model C: When they were changing the technological process, they chose another material.

(When) Changing the technological process they chose another material.

1. When you are describing metallic materials, you may use the term 'metals'. 2. When you are studying the history of civilizations, you get to know that some of them were named by the level of their materials development. 3. When they were making an experiment, they used these data.

Model D: Though the letter was written, it was not sent.

Though written the letter was not sent.

1. Though this alloy is used in the production of this tool, it will not have a wide application in the future. 2. Though cast iron is considered rather brittle, it has a wide application. 3. Though thermosets are moulded only once, they have a wide application.

Exercise 5. Read the text, try to focus on its essential facts and choose the most suitable heading given below for each paragraph.

1) Metallic Materials

2) Ceramics

- 3) Various Classes of Materials
- 4) Polymers
- 5) Choosing Materials

DIFFERENT KINDS OF ENGINEERING MATERIALS

Materials played a major role in the development of societies. Civilizations were named by the level of their materials development, e.g. the Stone Age, the Bronze Age, and the Iron Age. The earliest humans had an access to only a very limited number of natural materials. Modern technologies have made it possible to produce new materials. More than 50,000 materials with specialized properties have been developed by now. Materials science encompasses various classes of materials, but the traditional groups of engineering materials are metallic materials (metals and alloys) and non-metallic materials (polymers, ceramics, etc.).

Metallic materials include ferrous (those that contain iron) and non-ferrous (those that do not contain iron) metals. It should be noted that while describing alloys which are metallic materials it is possible to use the term 'metals'. The most common ferrous metals are cast iron and steel, which are both alloys. Different elements in alloys influence properties of materials: large amount of carbon in cast iron increases its brittleness; stainless steels containing nickel or chromium do not rust; steels, which contain tungsten or cobalt, are extremely hard, etc. The most widely used non-ferrous metals are aluminium and copper. Aluminium alloys are widely used in engineering structures where light weight or corrosion resistance is required. Copper is a ductile, malleable metal with a very high thermal and electrical conductivity. It is a frequent element of various metal alloys: brass (copper and zinc), bronze (copper and tin/lead).

Polymers are representatives of non-metallic materials. One of the best known natural polymers is rubber. However, most of the polymers used in industry are not natural but synthetic; they are generally called 'plastics'. Plastics can be divided in two categories: thermoplastics and thermosets. Thermoplastics can be heated and moulded numerous times. Common engineering thermoplastics are ABS (acrylonitrile butadiene styrene); polycarbonate; PVC (polyvinylchloride). Thermosets can be heated and moulded only once, they cannot be remoulded. The most common engineering thermosets are epoxy resins and polyamides. The properties of plastics are indispensable: they are lightweight, hard, easy to shape and colour, flexible, non-rusting, relevantly cheap, etc.

Ceramic materials are inorganic, non-metallic materials which are formed by the action of heat and subsequent cooling. Clay was one of the earliest materials used to produce ceramics, but many different ceramic materials are now being used in domestic and industrial products. Ceramics are strong, stiff, brittle, chemically inert. They are non-conductors of heat and electricity, but still their properties vary widely. For example, porcelain is widely used to make electrical insulators, but some ceramic compounds made from a metal and a non-metal are superconductors.

Thus, at present a lot of engineering materials are available to engineer, who has to choose the one best suited to serve the given purpose.

Exercise 6. Share your vision about engineering materials using the following phrases: in my opinion, if I am not mistaken, as far as I remember, etc.

1. What technologies made it possible to produce new materials?
2. What groups can engineering materials be divided into?
3. What ferrous metals do you know?
4. What non-ferrous metals do you know?
5. What properties of ferrous metals can you name?
6. What are the most important properties of aluminium?
7. Where are aluminium alloys used?
8. What copper alloys do you know?
9. What are the most common representatives of non-metallic materials?
10. What is the difference between thermoplastics and thermosets?
11. Can you name common engineering thermoplastics?
12. Why are the plastics properties indispensable?
13. How are ceramics formed?
14. Are ceramics good conductors of heat and electricity?
15. What should an engineer take into consideration while choosing a material for the given purpose?

Exercise 7. Complete logically the following sentences.

1. Materials played ...
2. Civilizations were named by ...
3. The earliest humans had an access to...
4. Modern technologies have made ...
5. Materials science encompasses ...
6. The traditional groups of engineering materials are ...
7. Metallic materials include ...
8. Polymers are ...
9. Plastics can be divided into ...
10. Ceramics are ...

Exercise 8. Translate the following sentences from Russian into English. You will have a story on the topic as a pattern.

1. Современные технологии сделали возможным производство новых материалов.
2. К настоящему времени созданы более 50 000 материалов с определенными свойствами.
3. Металлы и неметаллы - традиционные группы конструкционных материалов.
4. Металлические материалы включают черные и цветные металлы.
5. Самые распространенные черные металлы - чугун и сталь.
6. Самые широко используемые цветные металлы - алюминий и медь.
7. Полимеры - представители неметаллических материалов.
8. Синтетические полимеры могут быть разделены на две категории:

термопластические и термореактивные пластмассы. 9. Свойства пластмасс незаменимы: они легкие, твердые, нержавеющие, хорошо формуются и красятся. 10. Керамические материалы также являются представителями неметаллических материалов, и их свойства имеют большой диапазон.

Exercise 9. Read and make a summary of the text.

ELEMENTS, COMPOUNDS, MIXTURES AND COMPOSITES

Taking into consideration the chemical composition of materials, that is the chemicals they contain, and how the chemicals are combined, we may distinguish the following main categories of materials: elements, compounds, mixtures and composites.

Pure materials in their basic form are called elements. They cannot be broken into separate constituents. The most common elements widely used in engineering are iron, aluminium and carbon.

Materials which consist of two or more elements combined by chemical reaction present a category of compounds. An everyday example is water – a compound of hydrogen and oxygen.

Mixtures include two or more elements or compounds which are mixed together but are not chemically bound. The most common mixtures used in engineering are alloys. Steel, an iron-carbon alloy, can include in small quantities other elements such as chromium, manganese and tungsten.

A composite material is a matrix with a reinforced material inside it. Fiberglass, correctly called glass-reinforced plastic, is a composite with a plastic matrix reinforced with fiberglass. Composite materials are considered to be hi-tech materials.

Exercise 10. Compile information about engineering materials and participate in a project. Give reasons why this or that material is widely used in machine building industry. You may use the following web site:
www.materialmoments.org/top100.html

TEST 3

1. Choose the proper words and fill in the blanks.

1. Materials which consist of two or more elements combined by chemical reaction present a category of ...

A elements B compounds C mixtures D composite materials

2. ... is a matrix with a reinforced material inside it.

A An element B A compound C A mixture D A composite material

3. ... includes two or more elements which are not chemically bound.

A An element B A compound C A mixture D A composite material

4. ... cannot be broken into separate constituents.

- A An element B A compound C A mixture D A composite material
5. *Cast iron and steel are ...*
 A elements B compounds C mixtures D composite materials
6. *Copper is ...*
 A an element B a compound C a mixture D a composite material
7. *Polymers are representatives of ...*
 A ceramics B plastics C non-metallic materials D thermosets
8. *... polymers are usually called 'plastics'.*
 A Natural B Synthetic C Cheap D Non-rusting
9. *Ceramics are ...*
 A ductile B stiff C malleable D lightweight
10. *A lot of engineering materials are ... to engineer.*
 A flexible B brittle C available D subsequent

2. Fill in the blanks with the proper forms of the Verbs.

1. *... rather brittle this material is not widely used.*
 A Been B Being C Have been D Has been
2. *... this experiment the engineers should have two types of thermoplastics.*
 A Made B Makes C Make D To make
3. *The technological process of ... this material was changed during the experiment.*
 A producing B to produce C produce D produced
4. *This problem is ... by the engineers.*
 A to research B researching C researched D research
5. *The materials ... in the production of these tools are alloys.*
 A to use B using C to be used D to have used
6. *While ... ceramics they changed the technological process.*
 A form B to form C forming D to be formed
7. *Modern technologies have made it possible ... new materials.*
 A to produce B to be produced C produce D to have been produced
8. *Stainless steels ... nickel or chromium do not rust.*
 A contain B contains C have contained D containing
9. *The most widely ... non-ferrous metals are aluminium and copper.*
 A to use B use C used D using
10. *One of the best ... natural polymers is rubber.*
 A know B known C to know D to be known

MODULE 4. MOTOR CAR COMPONENTS

Exercise 1. Read and guess the meanings of the new words. If you have some difficulties use the dictionary at the end of this book.

- 1) *engine, chassis, body.* The main structural components of a motor car are engine, chassis, and body.
- 2) *petrol (gasoline) engine.* A petrol (gasoline) engine is the most popular for light passenger vehicles.
- 3) *capacity.* The engine in heavy vehicles is usually a large capacity diesel.
- 4) *pulling power, reliability, low fuel consumption.* The main requirements for a diesel are high levels of pulling power, reliability, and low fuel consumption.
- 5) *transmission, drive lines, steering systems.* Chassis embraces transmission, drive lines, and steering systems.
- 6) *clutch, gearbox, propeller shaft, drive shafts, half-shafts.* Transmission includes clutch, gearbox, propeller shaft, main shaft, differentials, final drive shafts or half-shafts.
- 7) *front and rear axles, suspension.* Drive lines consist of frame, front and rear axles, suspension, and wheels.
- 8) *layout.* Motor cars may have three types of drive layout.
- 9) *rear-wheel drive, front-wheel drive, four-wheel drive.* Vehicles may contain rear-wheel drive, front-wheel drive, and four-wheel drive layout.
- 10) *accessible.* When the rear wheels act as the driving wheels, spacing out the main components makes each unit accessible.
- 11) *to intrude.* When the rear wheels act as the driving wheels, the transmission components intrude into the passenger compartment.
- 12) *to distribute.* Four-wheel drive arrangement distributes the drive to all four wheels.
- 13) *to reduce wheel spin.* It reduces the risks of wheel spin.
- 14) *springs, shock absorbers, linkages.* The suspension system involves springs, shock absorbers, and linkages.
- 15) *wheel steering, brake steering.* The steering systems involve wheel steering and brake steering.
- 16) *vehicle's handling.* The suspension system contributes to the vehicle's handling for good safety and driving pleasure.
- 17) *to isolate.* The suspension system keeps vehicle occupants comfortable and well isolated from road bumps, vibration, etc.
- 18) *integral chassis frame and body.* Most modern cars are built with integral chassis frame and body.
- 19) *stiff.* The frameless or integral arrangement provides a stiff light construction to the motor car.
- 20) *suitable.* This frameless or integral arrangement is suitable for mass-produced vehicles.
- 21) *to withstand.* A suitable body shell can withstand various frame stresses.
- 22) *unitary.* A small passenger vehicle uses a lightweight unitary construction.

23) *to locate*. A light unitary construction contains relatively light vehicle systems and components.

24) *sufficient*. A light unitary construction provides sufficient space for a driver and passengers.

Exercise 2. Read the international words, mind the stress.

Motor, structure, system, component, design, construction, chassis, transmission, differential, popular, diesel, act, compactness, modern, acceleration, risk, shock, active, comfortable, vibration, integral, mass, stress.

Exercise 3. Read the sentences, point out the Verbals, the Modal Verbs and their equivalents. Give the Russian equivalents. If you have some difficulties use the grammar reference at the end of the book.

1. They have to provide the necessary tools. 2. This structure should fulfil a number of requirements. 3. The structure must contain all the systems and components. 4. They are able to arrange all the components. 5. The suspension system is to keep the vehicle occupants comfortable. 6. Being rather stiff the frameless or integral arrangement can withstand various frame stresses. 7. The front-wheel drive is to be rather compact. 8. The four-wheel drive is to reduce the risks of wheel spin. 9. Producing high levels of pulling power the engine in heavy vehicles is usually a large capacity diesel. 10. Spacing out the main components in RWD layout makes each unit accessible.

Exercise 4. Make up your own sentences according to the models.

Model A: *He can drive this motor car.*

He must drive this motor car.

He is able to drive this motor car.

He has to drive this motor car.

1. He can arrange these components. 2. He can provide the proper model design. 3. He must provide the proper model design. 4. The four-wheel drive arrangement must distribute the drive to all four wheels. 5. She must handle the vehicle very carefully.

Model B: *The suspension system serves to keep vehicles occupants comfortable.*

The suspension system serves for keeping vehicles occupants comfortable.

1. The suspension system serves to contribute to the vehicle's handling. 2. The rear wheels in RWD layout serve to drive wheels. 3. A vehicle structure serves to provide a location for all the necessary vehicles systems and components. 4. A vehicle structure serves to fulfil a number of requirements. 5. A large capacity diesel serves to produce high levels of pulling power.

Exercise 5. Read the text, try to focus on its essential facts and choose the most suitable heading given below for each paragraph.

1) Engine

2) Suspension System

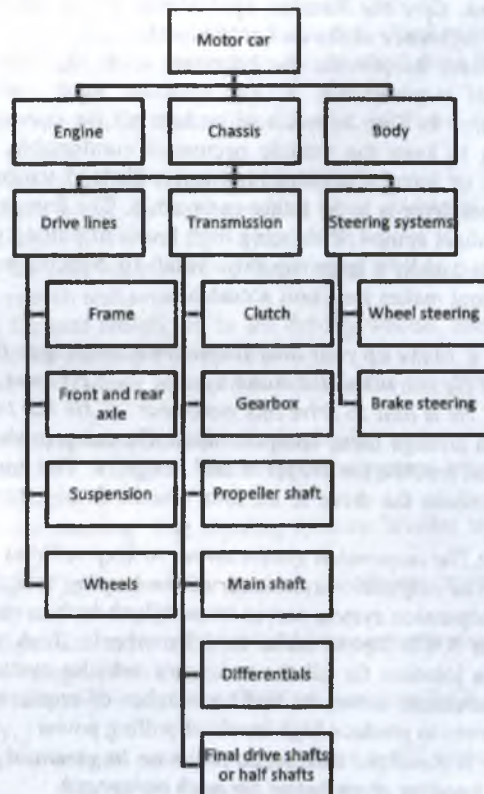
3) Integral Chassis Frame and Body

4) Motor Car Components

5) Transmission and Drive Lines

MOTOR CAR STRUCTURE

A structure of a vehicle has to fulfil a number of requirements. The prime purpose of the vehicle structure is to provide a location for all the necessary vehicle systems and components. The purpose of the vehicle will also dictate the size and weight of the vehicle systems and components and therefore the structure will be designed accordingly. The main structural components of a motor car are engine, chassis and body. Chassis embraces transmission (clutch, gearbox, propeller shaft, main shaft, differentials, final drive shafts or half-shafts), drive lines (frame, front and rear axles, suspension and wheels), steering systems (wheel steering and brake steering).



Motor car components

The usual source of power for a motor car is an internal-combustion engine. A petrol (gasoline) engine has traditionally been the most popular for light

passenger vehicles. The engine in heavy vehicles is usually a large capacity diesel, the main requirements for which are an ability to produce high levels of pulling power, reliability, and low fuel consumption.

The power of the engine is transmitted through the transmission and drive lines to the drive wheels. For the rear-wheel drive (RWD) layout, the rear wheels act as the driving wheels. Spacing out the main components in this layout makes each unit accessible but a drawback is the intrusion of the transmission components into the passenger compartment. The compactness of the front-wheel drive (FWD) layout has made it very popular on modern cars, especially on small cars. The arrangement of four-wheel drive (4WD) is safer because it distributes the drive to all four wheels and during acceleration it reduces the risks of wheel spin.

The suspension system involving springs, shock absorbers and linkages serves a dual purpose: contributing to the vehicle's handling for good active safety and driving pleasure, and keeping vehicles occupants comfortable and reasonably well isolated from road bumps, vibrations, etc.

Most modern cars are built with an integral chassis frame and body. This frameless or integral arrangement provides a stiff light construction to the motor car, which is particularly suitable for mass-produced vehicles. A suitable designed body shell can withstand various frame stresses. A lightweight unitary construction contains relatively light vehicle systems and components, and provides sufficient space for a driver and passengers.

Exercise 6. Share your vision about motor car components using the following phrases: to my mind, in my opinion, if I am not mistaken, as far as I remember, it seems to me, etc.

1. What is the prime purpose of the vehicle structure?
2. What determines the size and weight of the vehicle systems and components?
3. What are the main structural components of a light passenger vehicle?
4. The usual source of power for a motor car is an internal-combustion engine, isn't it?
5. What engine is the most popular for light passenger vehicles? Why?
6. What engine is the most popular for heavy vehicles? Why?
7. Chassis includes transmission, drive lines, and steering systems, doesn't it?
8. What components does transmission embrace?
9. Can you name the drive lines units?
10. What is the difference between rear-wheel drive, front-wheel drive, and four-wheel drive layout? Which drive layout is safer? Why?
11. Which system isolates vehicles occupants from road bumps and vibrations?
12. Does a lightweight unitary construction provide sufficient space for a driver and passengers?
13. Have you any ideas how to improve a motor car structure?
14. Have you ever driven a car?
15. Which motor car body do you prefer?

Exercise 7. Complete logically the following sentences.

1. A structure of a vehicle fulfils ...
2. The vehicle structure provides ...
3. The purpose of the vehicle dictates ...
4. The main structural components of a motor car are ...
5. An internal-combustion engine is ...
6. A petrol engine is ...
7. A large capacity diesel is ...
8. The power of the engine is transmitted ...
9. The steering systems consist of ...
10. Most modern cars are built ...

Exercise 8. Translate the following sentences from Russian into English. You will have a story on the topic as a pattern.

1. Главные структурные компоненты автомобиля: двигатель, шасси и кузов.
2. Источник энергии для автомобиля – двигатель внутреннего сгорания.
3. Бензиновый двигатель – самый популярный для легких пассажирских транспортных средств, двигатель в тяжелых транспортных средствах в большинстве случаев – мощный дизельный двигатель.
4. Шасси состоит из трансмиссии, ходовой части и системы управления.
5. Трансмиссия включает сцепление, коробку передач, карданную передачу, главную передачу и приводные валы или полуоси.
6. Ходовая часть вмещает раму, передний и задний мосты, подвеску, колеса.
7. Энергия двигателя передается через трансмиссию и ходовую часть к ведущим колесам.
8. Система подвески, включающая пружины, амортизаторы и направляющий аппарат, служит двойной цели: улучшает безопасность и надежность управления автомобилем и предоставляет пассажирам комфорт и оберегает их от изъятий дороги, вибраций и т.д.
9. Системы управления состоят из рулевого управления и тормозной системы.
10. Большинство современных автомобилей сконструированы с несущим кузовом.

Exercise 9. Read the text and mind the main types of a motor car body.

TYPES OF A MOTOR CAR BODY

The main purpose of a motor car body is to provide comfortable accommodation for a driver and passengers. With the introduction of unitary constructions, the body has become the main structure onto which all other vehicle elements are attached. Therefore, the body is both a load-bearing structure and a comfortable location for the occupants. There exist some body types of a motor car, such as saloon, estate, hatchback, coupe, convertible, etc.

Saloon is a fully enclosed body with either two or four passenger doors. The common shape of the saloon body is based on three 'boxes': the front box forms

the engine compartment, the centre section is the container for the occupants and the rear box is a storage space, called a boot (trunk) for the luggage.

Estate (station wagon) has the roofline extended to the rear of the body to enlarge floor area for the carriage of luggage or goods. The rear door enables bulky or long objects to be loaded easily. Stronger suspension springs are fitted in the rear to support the extra load.

The hatchback design is usually based on a saloon body but with the boot or trunk area blended into the centre section of the body therefore the hatchback is halfway between a saloon and an estate car.

Coupe is usually two-door type intended for two people: a driver and one passenger. Some coupe models are designed '2 + 2' but the back area is more suitable for children or for occasional adult use.

Convertible, also called cabriolet or drop-head coupe, can be changed into an open car by either removing a rigid roof or lowering a collapsible fabric roof.

The majority of mass-produced cars have a pressed steel body, although aluminium bodies are being used increasingly due to their lighter weight. Another common practice is to mould body panels from GRP (glass-reinforced plastics, often referred to as fibreglass). Other materials are also now used, such as carbon fibre, to produce body panels and structures.



Saloon



Estate (station wagon)



Hatchback



Coupe



Convertible

Exercise 10. Compile information about different car models or motor car components and participate in a project. Present the project to your group. You may use the following web sites: www.visualdictionaryonline.com, www.automotivecare.com

TEST 4

1. Choose the proper words and fill in the blanks.

1. A structure of a vehicle provides a ... for all necessary vehicle systems.
A location B number C requirement D purpose
2. A motor car includes engine, chassis, and ...
A suspension B body C diesel D clutch
3. Transmission embraces ..., gearbox, propeller shaft, etc.
A frame B brakes C clutch D rear axle
4. ... systems are wheel steering and brake steering.
A Main B Major C Sufficient D Steering
5. Drive lines include ..., front and rear axles, etc.
A frame B gearbox C clutch D space
6. Suspension involves ..., shock absorbers, and linkage.
A propeller shaft B springs C capacity D handling
7. For the RWD ..., the rear wheels act as the driving wheels.
A space B linkage C spacing out D layout
8. In the ... layout each unit is accessible.
A RWD B FWD C 4WD
9. Relatively light vehicle systems and components are located in a lightweight ... construction.
A sufficient B unitary C usual D main

10. *The frameless arrangement provides a ... light construction to the motor car.*

A isolated

B driving

C front

D stiff

2. *Fill in the blanks with the proper grammar forms.*

1. *The power of the engine ... through the transmission and drive lines.*

A is to be transmitted

C is to transmit

B are to be transmitted

D to be transmitted

2. *The main purpose of a motor car ... comfortable accommodation for occupants.*

A is to be provided

C provides

B provided

D is to provide

3. *Bulky equipment ... easily into the estate body car.*

A can load

B can be loaded

C can loaded

D can be load

4. *The hatchback design ... on a saloon body.*

A to be based

B are based

C is based

D based

5. *Cabriolet ... into an open car.*

A can change

B can changed

C can be change

D can be changed

6. *Aluminium bodies ... due to their lighter weight.*

A used

B use

C are being

D are being used

7. *Most mass-produced cars ... a pressed steel body.*

A have

B is to have

C has

D having

8. *Coupe models ... as two-door models.*

A have designed

B have

C to be designed

D are designed

9. *This construction ... a box.*

A resemble

B resembles

C resembling

D are to resemble

10. *Electrical power ... to operate the motor car electrical and electronic equipment.*

A needs

B need

C is needed

D are needed

MODULE 5. CIVIL ENGINEERING

Exercise 1. Read and guess the meanings of the new words. If you have some difficulties use the dictionary at the end of this book.

- 1) *civil, civilians*. The term "civil engineering" describes engineering work performed by civilians.
- 2) *maintenance*. It deals with the design, construction, and maintenance of the physical and naturally built environment.
- 3) *to distinguish*. It was used to distinguish the work of the engineer with non-military purposes from that of a military engineer.
- 4) *to enrich, achievement*. The art of civil engineering was enriched with new achievements of science.
- 5) *differentiation*. It led to differentiation of mechanical, electrical, nuclear engineering, etc.
- 6) *to separate*. They separated themselves from civil engineering.
- 7) *power engineering*. It is divided now into the main branches: communications engineering and power engineering.
- 8) *water desalination*. Water desalination removes salt and other minerals to make water suitable for drinking.
- 9) *to branch off*. They branched off from civil engineering.
- 10) *fluid mechanics*. Fluid mechanics is the branch of physics that studies fluids (liquids, gases, and plasmas) and the forces on them.
- 11) *to neglect*. Civil engineering is improving existing infrastructures that have been neglected.
- 12) *to shape*. Civil engineers quietly shape the history of nations around the world.
- 13) *to envision*. We can creatively envision the progress of our tomorrow.
- 14) *semi-detached house or duplex*. Semi-detached house consists of pairs of houses built side by side.
- 15) *tool shed*. There are a lot of funny things in my tool shed.
- 16) *arbour*. Our architect designs a unique arbour that adds loads of charm to your front garden entrance.

Exercise 2. Read the international words, mind the stress.

Engineering, professional, design, construction, physical, natural, duplex, canal, airport, system, irrigation, dock, aqueduct, Industrial Revolution, series, mechanical, electrical, atomic, energy, fact, interest, practical, thermodynamics, communication, date, profession, engineer, civilize, start, Rome, protect, public, infrastructure, chemical, process, mechanics, structure, hydraulics.

Exercise 3. Read the sentences, point out the Simple, Continuous, and Perfect Tenses. Give the Russian equivalents. If you have some difficulties use the grammar reference at the end of the book.

1. First the word "civil engineering" was used to distinguish the work of the engineer for non-military purposes. 2. There were two main branches of

engineering. 3. It led to differentiation of mechanical, electrical, nuclear engineering, etc. 4. They separated themselves from civil engineering, and were called "mechanical engineers". 5. It is divided now into several branches. 6. Today civil engineering includes a lot of branches. 7. A civil engineer is a person who practises civil engineering. 8. They are improving existing infrastructures. 9. Civil engineers shape the history of nations. 10. They are exploring civil engineering's influence on our life.

Exercise 4. Make up your own sentences according to the model.

Model A: This work was performed by them.

They performed this work.

1. This construction was built by them. 2. The art of civil engineering was enriched by them. 3. The aqueduct was designed by civil engineers. 4. The irrigation system has been upgraded by farmers. 5. The infrastructure is used by citizens.

Model B: They usually perform this work.

They have just performed this work.

1. As a rule, they separate themselves from this branch. 2. Future engineers use some aspects of hydraulics in their projects. 3. Environmental scientists and specialists experience the system of protection in our country. 4. They become the leading manufacturers of construction sets. 5. Civil engineering covers different areas of engineering

Exercise 5. Read the text, try to focus on its essential facts and choose the most suitable heading given below for each paragraph.



- 1) The Civil Engineer
- 2) From the History of Engineering
- 3) What is Civil Engineering?

The term "civil engineering" describes engineering work performed by civilians. In general it includes the design, construction, and maintenance of the physical and naturally built environment. Civil engineering covers different areas of engineering, including the design and construction of large buildings, roads, bridges, canals, dams, tunnels, railway lines, airports, water-supply and irrigation systems, harbors, docks and aqueducts. In order to understand clearly what civil engineering constitutes nowadays, let us consider briefly the development of different branches of engineering.

First the word "civil engineering" was used to distinguish the work of the engineer for non-military purposes. And up about the middle of the 18th century there were two main branches of engineering – civil and military. But as time went on, the art of civil engineering was enriched with new achievements of science. With the beginning of the Industrial Revolution and later there came a remarkable

series of mechanical inventions, great discoveries in electrical science and atomic energy. It led to differentiation of mechanical, electrical, nuclear engineering, etc. It is a well-known fact that with the invention of the steam engine and the growth of factories a number of civil engineers got interested in the practical application of the science of mechanics and thermodynamics to the design of machines. They separated themselves from civil engineering, and were called “mechanical engineers”. With the development of the science of electricity, there appeared another branch of engineering – electrical engineering. It is divided now into main branches: communications engineering and power engineering. Today civil engineering includes the production and distribution of energy, the development of aircraft and airports, the construction of chemical process plants and nuclear power stations, and water desalination. At present there are hundreds of subdivisions of engineering, but they all, at one time or another, branched off from civil engineering.

While the definition “civil engineering” dates back only two centuries, the profession of civil engineer is as old as civilized life. It started developing with the rise of ancient Rome. The civil engineer needs a thorough knowledge of the properties and mechanics of construction materials, of the mechanics of structures and soils, and of hydraulics and fluid mechanics. A civil engineer is a person who practices civil engineering – the application of planning, designing, constructing, maintaining, and operating infrastructures while protecting the public and environmental health, as well as improving existing infrastructures that have been neglected. In doing so, civil engineers quietly shape the history of nations around the world. Only by exploring civil engineering’s influence in shaping the world we can creatively envision the progress of our tomorrow. One of the largest benefits of a civil engineering job is that the demand for new facilities and the maintenance of existing ones makes civil engineers always in demand.

Exercise 6. Share your vision about civil engineering using the following phrases: to my mind, in my opinion, if I am not mistaken, as far as I remember, it seems to me, etc.

- 1) What does the term “civil engineering” describe?
- 2) What does civil engineering cover?
- 3) How many branches of engineering were up about in the middle of the 18th century?
- 4) How was the civil engineering being developed with the Industrial Revolution?
- 5) When did civil engineers get interested in the practical application of science?
- 6) How were mechanical engineers separated from civil engineering?
- 7) When did electrical engineering appear? What branches is it divided into nowadays?
- 8) What does civil engineering include today?
- 9) Did subdivisions of engineering branch off from civil engineering?

- 10) How old is the profession of civil engineer?
- 11) What kind of thorough knowledge does he need?
- 12) What does the civil engineer practise?
- 13) Who shapes the history of nations around the world?
- 14) How can we envision the progress of our tomorrow?
- 15) What is the largest benefit of a civil engineering job?

Exercise 7. Complete logically the following sentences.

1. The term "civil engineering" describes
2. In general it includes... .
3. Civil engineering covers
4. With the invention of the steam engine and the growth of factories, a number of civil engineers got interested in
5. With the development of the science of electricity, there appeared
6. Today civil engineering includes
7. At one time or another, the subdivisions of engineering branched off from
8. The civil engineer needs
9. Civil engineers quietly shape
10. One of the largest benefits of a civil engineering job is

Exercise 8. Translate the following sentences from Russian into English. You will have a story on the topic as a pattern.

1. Термин «гражданское строительство» включает проектирование, строительство, поддержание физической и естественно архитектурной среды.
2. Гражданское строительство охватывает различные области инженерии, в том числе проектирование и строительство крупных зданий, дорог, мостов, каналов, плотин, железнодорожных линий, аэропортов, систем водоснабжения и ирригации, гаваней, доков и акведуков.
3. Профессия инженера-строителя появилась с возникновением Древнего Рима.
4. Инженер-строитель должен владеть знаниями в области геодезии, механики, физики, гидравлики, а также досконально знать свойства строительных материалов.
5. Примерно до середины восемнадцатого века существовали два основных направления инженерии: гражданское и военное.
6. С началом промышленной революции и позже произошли значительные изменения в области механики, электричества и атомной энергетики.
7. С появлением парового двигателя многие инженеры проявили интерес к практическому применению науки в области термодинамики и механики при создании машин.
8. Они отделились от гражданского строительства и стали инженерами механиками.
9. Инженер-строитель – это человек, который занимается гражданским строительством.
10. С развитием электричества появились другие отрасли промышленности.



Exercise 9. Read the text and mind the main types of human dwellings.

HUMAN DWELLINGS

Some form of building and utilization of the materials and forces of nature have always been necessary for the people from the prehistoric times. In those ancient times men sometimes made their homes in trees, using the leaves for keeping out rain and sun. In colder countries the people of long ago used to dwell in caves. Primitive stone structures, huts and tents are the earliest types of human dwellings. They built their dwellings from different materials, such as mud, wood or stones. Mud was often used in hot countries because people found out that bricks made of mud and dried in the hot sunshine became almost as hard as stones. In Egypt some buildings are still standing after several thousands of years.

But many thousands years ago, there were no houses such as people live in today. It goes without saying that nowadays there are a lot of types of dwellings. Everyone can choose a house he or she likes. In many cases, your budget will dictate the type of property that you can consider in a given location. The types of properties you will be choosing from include free-standing house (detached house), semi-detached house or duplex, terrace house, townhouse, and flat (apartment). For instance, some people prefer semi-detached houses or duplexes (as the Americans call them). Such houses attract them because they are less expensive than mansions or bungalows, for example. You also have neighbours you can always turn to if you need something, but at the same time your neighbours can disturb you while repairing their part of the house or when they listen to loud music.

Other people like cottages and farmhouses. People, who prefer these types of dwelling, are fond of nature, fresh air and they want to have calm and measured rhythm of life. Usually they keep the poultry and the cattle. One of advantages living in such house is that you have your own land where you can grow fruit and vegetables, make flowerbeds and plant various beautiful flowers. You can also build some outhouses like a green-house, a garage, a tool shed, an arbour. The most important disadvantage of living in a farmhouse or in a cottage is that it takes a lot of time to get to the nearest town, but if you have a car it isn't a problem for you.

A block of flats is the cheapest type of dwelling in a town. Flats can be of different sizes: one-roomed, two-roomed, three-roomed and you can choose a flat you like. Some people think that it takes less time to tidy up a flat than a house. But as any type of dwelling a flat has its disadvantages: a noise that your neighbours make when they, for example, drill or hammer or when they organize a party.

Exercise 10. *Compile information about different human dwellings and participate in a project. Present the project to your group. You may use the following web site:*

<http://visual.merriam-webster.com/arts-architecture/architecture.php>

TEST 5

1. Choose the proper words and fill in the blanks.

1. The term "civil engineering" describes engineering work performed by...
A students B civilians C militaries D drivers
2. It deals with the design, construction, and ... of the physical and naturally built environment.
A maintenance B engineering C subdivision D mechanics
4. The art of civil engineering was enriched with new... of science.
A achievements B losses C failures D neglects
5. Industrial revolution led to differentiation of mechanical, electrical, nuclear...
A fabricating B assembling C constructing D engineering
6. In colder countries the people of long ago used to in caves.
A dwell B prefab C dream D forge
7. Only by exploring civil engineering's influence in shaping the world we can creatively ... the progress of our tomorrow.
A envision B ignore C look away D neglect
8. ... people prefer semi-detached house or duplex.
A Everybody B Somebody C Anyone D Some
9. Such houses attract them because they are ... expensive than mansions or bungalows.
A little B the least C less D a little
10. can be used to make a distinction between separate areas in a yard.
A Aqueduct B Arbours C Dock D Irrigation system

2. Fill in the blanks with the proper grammar forms.

1. A civil engineer ... a thorough knowledge of the properties and mechanics of construction materials, of the mechanics of structures and soils, and of hydraulics and fluid mechanics.
A is needing B needs C have needed D need
2. The types of properties you ... from include detached house, semi-detached house, terrace house, townhouse or a flat.
A choose B will be chosen C to choose D will have been chosen
3. Some people semi-detached houses or duplexes (as the Americans call them).
A prefer B are preferring C be preferred D have been preferred
4. You ... some outhouses like a green-house, a garage, a tool shed, an arbour.
A can also to build B can also build
C can also be built D can also been built

5. Civil engineers architect firms and construction firms.

A also work with B also work to

C as work with D also work

6. There are many different things about arbor structures, including just what they're used for, the types and decorations used on them, and the average installation process.

A know B to be know C to know D knowing

7. It a two-storied but not a large brick house with a red gable roof, fenced by a hedge

A is B be C are being D will be being

8. Mud in hot countries.

A was often used B is often use C has often use D having often use

9. My house a small open balcony.

A have should B should have C should be have D should have to

10. But as any type of dwelling a flat its disadvantages.

A having B be having C has D have

MODULE 6. OIL & GAS EQUIPMENT

Exercise 1. Read and guess the meanings of the new words. If you have some difficulties use the dictionary at the end of this book.

1) *powerhouse*. The oil and gas industry is a global powerhouse employing hundreds of thousands of workers worldwide.

2) *upstream, downstream*. The oil and gas industry can be broken down into two key areas: upstream and downstream.

3) *exploration*. The Upstream component is referred to as the E & P (exploration and production (E&P)).

4) *crude oil*. This involves search for underwater and underground natural gas fields or crude oil fields

5) *raw materials*. The downstream refers to the filtering of the raw materials obtained during the upstream phase.

6) *onshore, offshore*. Oil and gas production takes place onshore and offshore.

7) *rig*. Construction of drilling wells and rigs is an enormous risk.

8) *a naturally occurring liquid*. Petroleum is a naturally occurring liquid found in rock formations.

9) *tar*. It can be as thick and black as tar or thin as water.

10) *flammable fluid*. Petroleum is a flammable fluid that is drilled from the earth.

11) *to refine*. Petroleum is refined to produce various types of fuel.

12) *vital*. It is vital to many industries, and it is of importance to the maintenance of industrial civilization

13) *extraction, refining*. The petroleum industry includes the global processes of exploration, extraction, refining, transporting marketing petroleum products.

14) *solvent, fertilizer*. Oil is the raw material for pharmaceuticals, solvents, fertilizers, and pesticides.

15) *subsidiary*. All oil trunk pipelines (except Caspian Pipeline Consortium) are owned and operated by the state-owned monopoly Transneft and oil products pipeline are owned and operated by its subsidiary Transneftproduct.

16) *marsh, bog, landfill, shallow sediment*. Biogenic gas is created by methanogenic organisms in marshes, bogs, landfills, and shallow sediments.

17) *to bury*. Deeper in the earth, at greater temperature and pressure, thermogenic gas is created from buried organic material.

18) *to undergo processing to remove impurities*. Before natural gas can be used as a fuel, it must undergo processing to remove impurities.

19) *to meet specifications*. Natural gas must undergo processing to meet the specifications of marketable natural gas.

20) *source*. Natural gas is an energy source often used for heating, cooking, and electricity generation.

21) *by-product*. The by-products of processing include ethane.

22) *to seep from the ground*. They discovered the potential to transport gas seeping from the ground in crude pipelines of bamboo.

23) *cantilever mast (derrick) drilling rig*. The cantilever mast drilling rig is built of a Π shape truss structure for easy installation, disassembly and transport.

24) *shaker*. This shaker must vibrate at 1750 rpm.

25) *pan, tap(pump)*. The safest method is to remove the pan before drilling and tapping.

Exercise 2. Read the international words, mind the stress.

Filter, diesel, kerosene, type, natural, formation, complex, mixture, hydrocarbon, molecular, plus, industrial, civilization, global, process, transport, tanker, market, product, gasoline, material, pharmaceutical, pesticide, human, general, history, reserve, monopoly, exporter, gas, mechanism, biogenic, thermogenic, formation, methanogenic, organism, temperature, press, thermogenic, organic, material, specification, ethane, propane, butane, molecular, hydrocarbons, sulfide, carbon, dioxide, helium, nitrogen, potential, bamboo, energy, electricity, generation, chemical, plastic, manufacture, commercial.

Exercise 3. Read the sentences, point out the Verbals, the Modal Verbs and their equivalents. Give the Russian equivalents. If you have some difficulties use the grammar reference at the end of the book.

1. He has to operate this drilling machine. 2. Petroleum can be also referred to as the primary material for a multitude of chemical products. 3. In recent years there has been a growing negative sentiment towards the oil and gas industry and "big energy". 4. It is estimated that 30 billion barrels are consumed globally each year - primarily by developed nations. 5. OilandGasIQ.com is the online portal dedicated to providing the latest intelligence for the oil and gas community worldwide. 6. Companies operating in the oil and gas industry may be regarded as fully integrated. 7. Many large companies operate globally and described as 'multinational'. 8. New technologies are helping us pump large amounts of oil and gas that were once considered unreachable. 9. Scientific exploration for oil, in the modern sense, began in 1912 when geologists were first involved in the discovery of the Cushing Field in Oklahoma, USA. 10. Our technology experts and research partners are constantly experimenting with new techniques.

Exercise 4. Make up your own sentences with the Verbals according to the model.

Model A: To prevent corrosion is vital in every step in the production of oil and gas.

Preventing corrosion is vital in every step in the production of oil and gas.

1. To choose an appropriate drilling rig is very important. 2. To identify rock types that can cause drilling problems is a unique opportunity to see what is below the surface. 3. To design a well is a task of a drilling engineer.

Model B: When the scientists were estimating the reservoir temperature, they used modern technology.

(When) Estimating the reservoir temperature the scientists used modern technology.

1. When our engineers were choosing the right shaker for drilling rig, they invited international partners. 2. When the cantilevered mast is assembled, the outside structure is joined together with large pins. 3. When the expected depth is reached, the case is cemented.

Model C: The top manager thought he would find out the choice of appropriate shaker for the different sections.

The top manager thought of finding out the choice of appropriate shaker for the different sections.

1. Our partner thought he would discuss the potential for lost circulation in the reservoir section. 2. Two groups thought they would be asked to give a presentation of a stuck pipe incident. 3. The members of our delegation thought to test a new rig.

Exercise 5. Read the text, try to focus on its essential facts and choose the most suitable heading given below for each paragraph.

- 1) What is natural gas?
- 2) What is petroleum?
- 3) What is oil and gas industry?

OIL AND GAS INDUSTRY

The oil and gas industry is one of the largest in the world. It is a global powerhouse employing hundreds of thousands of workers worldwide as well as generating hundreds of billions of dollars globally each year. The oil and gas industry can be broken down into two key areas: upstream and downstream. Upstream operations deal primarily with the exploration stages. This involves search for underwater and underground natural gas fields or crude oil fields. The downstream refers to the filtering of the raw materials obtained during the upstream phase. This means refining crude oil and purifying natural gas, marketing and commercial distribution of these products to consumers and end users in a number of forms including: natural gas, diesel, petrol, gasoline, lubricants, kerosene, jet fuel, asphalt, heating oil, LPG (liquefied petroleum gas) as well as a number of other types of petrochemicals. Oil and gas production takes place onshore and offshore. Drilling and Geology are two disciplines that depend heavily upon each other when a well is to be planned. Construction of drilling wells and rigs is an enormous risk. Companies need to calculate supply and demand in order to be certain that an operation will be profitable before it comes on stream.

Petroleum (oil) is a naturally occurring liquid found in rock formations. It can be as thick and black as tar or thin as water. It is a flammable fluid that is refined to produce various types of fuel. Petroleum consists of a complex mixture

of hydrocarbons of various molecular weights, plus other organic compounds. It is vital to many industries, and is of importance to the maintenance of industrial civilization. The petroleum industry includes the global processes of exploration, extraction, refining, transporting (often by oil tankers and pipelines), and marketing petroleum products. The largest volume products of the industry are fuel oil and gasoline (petrol). Petroleum (oil) is also the raw material for many chemical products, including pharmaceuticals, solvents, fertilizers, pesticides, and plastics. The petroleum industry in Russia is one of the largest in the world. The biggest Russian oil company is Rosneft followed by Lukoil, Surgutneftegaz, Gazprom Neft and Tatneft. All oil trunk pipelines (except Caspian Pipeline Consortium) are owned and operated by the state-owned monopoly Transneft and oil products pipeline are owned and operated by its subsidiary Transneftproduct. Petroleum is therefore integral to many industries, and is of critical importance to many nations as the foundation of their industries.

Russia has the largest reserves, and is the largest exporter, of natural gas. Natural gas is found in deep underground rock formations. Most natural gas was created over time by two mechanisms: biogenic and thermogenic. Biogenic gas is created by methanogenic organisms in marshes, bogs, landfills, and shallow sediments. Deeper in the earth, at greater temperature and pressure, thermogenic gas is created from buried organic material. Before natural gas can be used as a fuel, it must undergo processing to remove impurities, including water, to meet the specifications of marketable natural gas. The by-products of processing include ethane, propane, butane, pentane, and higher molecular weight hydrocarbons, hydrogen sulfide (which may be converted into pure sulfur), carbon dioxide, water vapor, and sometimes helium and nitrogen. Natural gas was used by the Chinese in about 500 B.C. They discovered the potential to transport gas seeping from the ground in crude pipelines of bamboo to where it was used to boil sea water in Ziliujing District. Natural gas is an energy source often used for heating, cooking, and electricity generation. It is also used as fuel for vehicles and as a chemical feedstock in the manufacture of plastics and other commercially important organic chemicals. In regions which house the major NOCs, these oil and gas companies are so vital they often contribute a significant amount towards national Gross domestic product (GDP).

Exercise 6. Share your vision about dwellings using the following phrases: to my mind, in my opinion, if I am not mistaken, as far as I remember, it seems to me, etc.

1. Why are oil and gas important?
2. How can the oil and gas industry be broken down?
3. What is the upstream component?
4. What is the downstream component?
5. What is petroleum?
6. What does refining crude oil mean?
7. What is the importance of petroleum as an energy resource?

11. Which product do petroleum resources provide in addition to energy?
12. What do companies need to calculate before building the drilling wells and rigs?
13. How do you know that oil and gas are present beneath the drill rig?
14. What would we do without petroleum?
15. What is the biggest Russian oil company?
16. What is natural gas?
17. What does purification natural gas mean?
18. Where can the drill rig be placed?

Exercise 7. Complete logically the following sentences.

1. The oil and gas industry is ...
2. This industry can be broken down into ...
3. The upstream component is also referred to as ...
4. The downstream component is referred to ...
5. Oil and gas production takes place ...
6. Petroleum (oil) is ...
7. The largest volume products of the petroleum industry are ...
8. Petroleum (oil) is also the raw material for ...
9. Most natural gas was created by ...
10. Natural gas is often used for

Exercise 8. Translate the following sentences from Russian into English. You will have a story on the topic as a pattern.

1. Нефтегазовая промышленность — отрасль экономики, занимающаяся добычей, переработкой, транспортировкой, складированием и продажей природных полезных ископаемых — нефти и газа, а также сопутствующих им продуктов. 2. Нефтедобыча — сложный производственный процесс, включающий в себя геологоразведку, бурение скважин и их ремонт, очистку добытой нефти. 3. Разработка месторождений нефти производится путем строительства нефтяных скважин. 4. Нефть известна человечеству с древнейших времён. 5. По составу нефть — сложная смесь углеводородов различной молекулярной массы. 6. Сырая нефть обычно не применяется, то же можно сказать и о газе. 7. После переработки нефти и природного газа получают исходное сырьё для химической и топливно-энергетической промышленности. 8. Качественное бурение — основа нефтегазодобывающего бизнеса. 9. Наши специалисты владеют знаниями современных технологий бурения и имеют опыт в оптимизации подбора буровых установок. 10. В настоящее время существуют альтернативные источники энергии.

Exercise 9. Read and make a summary of the text.

PETROLEUM IS A FOSSIL FUEL

Long before the dinosaurs, oceans covered most of the earth. They were filled with tiny sea animals and plants. These tiny animals and plants, called plankton, got their energy to live and multiply from sunlight. When they died they sank to the bottom of the sea. Sand covered them. The pressure and temperature deep underground turned the chemicals from the decaying animals and plants into a fossil fuel – crude oil and gas.

PETROLEUM IS NONRENEWABLE

So it took millions of years to form petroleum and natural gas. We can't get more done in a short time. That's why we call petroleum nonrenewable. Oil in general has been used since early human history to keep fires ablaze, and in warfare. People gathered oil that seeped from under the ground into ponds. It floated on the water.

REACHING INTO THE RESERVOIR



Before any drilling begins on land we may have to build access roads, construct a temporary power station or install wells for the water supply. In fragile habitats or very remote places helicopters or barges may be the only responsible way to get equipment and supplies into place.

Drilling for oil in the winds, currents and choppy waters of the open seas is even more challenging. The most difficult part is getting a drilling rig to stay in position despite the currents and waves.

Petroleum is buried underground in tiny pockets in rocks. We drill wells into the rocks to pump out the oil. Some wells are more than two miles deep. Oil rigs that can float are used to reach this oil. After the oil is drilled, it is sent to refineries. At the refineries, it is cleaned and made into different fuels. Most of the oil is made into gasoline. The oil is moved from one place to another by ships and trucks, and through pipeline.

DIFFERENT TYPES OF RIGS

In shallower water of up to 100 metres, we use what is called a jack-up unit. It starts out as a barge, which is towed into place. Legs extend to the sea floor and then the barge lifts out of the water, becoming a stable drilling platform.

In rougher seas or water up to 300 metres deep we use some of the water itself as a counterweight. A semi-submersible drilling rig is a platform attached to submerged pontoons. When the pontoons are flooded with water they lower into the ocean,

mening waves do not affect the platform nearly as much. Drill ships are held in place by large anchors or by dynamic positioning systems, which use computer-controlled propellers to help the ship stay in place.

STUDYING THE MUD

As the diamond or tungsten drill bit goes into the hard rock, a substance called 'mud' is pumped down through the pipe. As the mud comes back up through the outer part of the pipe, we get the first hard evidence showing whether we were right about the resources at the site. Geologists monitor the cuttings to check whether they're coming out in the sequences they expected, while records of the mud and rock fragments are kept for further study later on.

Once the exploratory well has been drilled, various instruments are lowered into it so we can learn more about the reservoir. This way we measure the natural radioactivity and electrical resistance of the rocks, as well as the pressure and temperature of the fluids or gases.

WE USE PETROLEUM EVERY DAY

Many cars, trucks, and planes all use fuel made from oil. Our factories use oil to make plastics and paints, medicines and soaps. We even burn oil to make electricity. We use more petroleum than any other energy source.

PETROLEUM CAN POLLUTE

Petroleum keeps us going, but it can damage our environment. Burning oil can pollute the air. Pollution from cars is a big problem in many parts of the country.

Oil companies are making cleaner gasoline and other fuels every year. Oil can also pollute the soil and water, and injure animals. Oil companies work hard to drill and ship oil as safely as possible. They try to clean up any oil that spills

Exercise 10. Compile information about different oil&gas equipment and participate in a project. Present the project to your group. You may use the following web site: <http://www.ogpe.com/index.html>

TEST 6

1. Choose the proper words and fill in the blanks.

1. The ... industry can be broken down into two key areas: upstream and downstream.

A food&gas B oil&gas C oil&coal D gas&go

2. Upstream operations deal primarily with the ... stages.

A exploration B presentation C distribution D generalisation

3. The downstream is referred to the filtering of the ... materials obtained during the upstream phase.

A flammable B global C raw D shallow

4. Oil and gas production takes place and offshore.
A onshore B byshore C inshore D bayshore
 5. Drilling and ... are two disciplines that depend heavily upon each other when a well is to be planned.
A Geology B Geography C Geometry D Geochemistry
 6. Construction of drilling wells and is an enormous risk.
A marshes B bogs C landfills D rigs
 7. Petroleum (oil) is a naturally occurring ... found in rock formations.
A liquid B gas C steam D stone
 8. Our partners drill wells into the rocks to ... out the oil.
A burn B pump C dry D mix
 9. The oil is moved from one place to another by ships and trucks, and through
A derrick B pipeline C rig D shaker
 10. As the diamond drill bit goes into the hard rock, a substance called ... is pumped down through the pipe.
A 'mud' B 'diesel' C 'kerosene' D 'gasoline'
- 2. Fill in the blanks with the proper forms of the Verbs.**
1. The pressure and temperature deep underground turned the chemicals from the ... animals and plants into a fossil fuel – crude oil and gas.
A decaying B decay C being decay D been decayed
 2. Before any ... begins on land we may have to build access roads and construct a temporary power station.
A drilling B drilled C being drilled D to drill
 3. In fragile habitats or very remote places helicopters or barges may be the only responsible way ... equipment.
A to get B been got C got D getting
 4. Oil rigs that can float are ... to reach this oil.
A using B used C to use D been used
 5. The oil is ... from one place to another by ships and trucks, and through pipeline.
A moving B moved C to have moved D to move
 6. A jack-up unit starts out as a barge, which is ... into place.
A towed B to tow C to have towed D towing
 7. A semi-submersible drilling rig is a platform ... to submerged pontoons.
A attached B to attach C have attached D attaching
 8. As the diamond or tungsten drill bit goes into the hard rock, a substance ... 'mud' is pumped down through the pipe.
A calling B to call C has called D called
 9. ... oil can pollute the air.
A Burn B To burn C Burning D Burned
 10. Oil companies work hard oil as safely as possible.
A drilling and shipping B to drill and ship
C to have drilled and shipped D drill and ship

MODULE 7. BUSINESS ENGLISH

WRITING LETTERS

Написание письма личного характера

В правом верхнем углу помещается адрес отправителя письма, под адресом дата отправления.

Как начать и как закончить письмо:

Приветствие может быть выражено следующим образом	Закончить письмо можно следующими словами
<i>Dear John,</i> <i>Dear Mary,</i> <i>My dear Jane,</i> <i>My dear Miss Brook,</i>	<i>Yours affectionately,</i> <i>James.</i> <i>Affectionately,</i> <i>Robert Green.</i> <i>Lovingly yours,</i> <i>(Miss) Barbara Jones.</i> <i>Always yours,</i> <i>Jack.</i> <i>Hugs,</i> <i>Andrew.</i>

Образец письма личного характера

186 Laring Avenue
Buffalo,
New York
June 16, 2009

Dear Kate,

I am glad to receive your letter. We are all pleased that you are having a good time. It would be nice to be there together with you.

I am preparing now for my exams. It is so difficult to study languages at the university. I hope that everything will be all right, but I am a little bit nervous about coming exams.

Bob has told me today that he is going to write you a letter. He is going to join you there in a week.

Have a lot of fun.

Hugs,
Andrew.

Написание официального письма

1. В правом верхнем углу помещается адрес отправителя, ниже дата отправления:

*13 Kensington Palace Gardens
London, S.W.
September 9th, 2009*

2. Слева ниже адрес, куда отправляется письмо:

*The Hilton Hotel
New Oxford Street
London, S.W.*

3. Как начать и как закончить письмо:

Вид письма	Приветствие может быть выражено следующим образом	Закончить письмо можно следующими словами
Должностным лицам	<i>Sir: Madam:</i>	<i>Yours respectfully, Respectfully yours, Yours very respectfully,</i>
В фирму или компанию	<i>Gentlemen: Ladies:</i>	<i>Yours truly,</i>
Людам, которых автор письма не знает	<i>My dear Mr. Richardson: Dear Mr. Richardson: My dear Mrs. Richardson: Dear Sir: Dear Sir and Madam:</i>	<i>Yours truly, Sincerely yours, Yours very truly, Very truly yours,</i>
Людам, которых автор письма хорошо знает	<i>Dear Mr. Wilson, Dear Miss Wilson, Dear Mrs. Wilson, Dear Professor Redhill, Dear Dr. Rodsom,</i>	<i>Very sincerely yours, Cordially yours, Yours cordially, Very cordially yours,</i>

Образец официального письма

*13 Kensington Palace Gardens
London, S.W.
September 9th, 2009*

*The Hilton Hotel
New Oxford Street
London, S.W.
Dear Sir,*

Will you please reserve for me a single room with a bath for three weeks. I plan to move on September 15th and leave on October 6th. Please let me know your rates.

*Yours truly,
Peter Volkov.*

Ответ на официальное письмо

*The Hilton Hotel
New Oxford Street
London, S.W.
September 11, 2009*

*11 Kensington Palace Gardens
London, S.W.*

Dear Mr Volkov,

We have reserved a single room with a bath in your name for the period of September 15th to October 6th. The rate is 60 pounds a day.

We look forward to your visit and hope your stay will be a very pleasant one.

*Faithfully yours,
A. Woodford*

Задания:

1. Write a letter to a friend of yours inviting him to a birthday party at your place.
2. Write a letter to your girl-friend asking her to spend a weekend at the sea-side.
3. Write a letter to the British Airways Office, Dimple Rd. 10, London, England. Ask for a copy of the time-table of flights between London and Moscow.
4. Write a letter to a radio station about the programme you do not like and explain why. Express your thoughts how it can be improved.
5. Write a letter to Garden View Hotel in London at Cross Road Street. Ask for accommodation for you and your sister. Explain the kind of accommodation you desire, the approximate rates that you wish to pay, and the length of your stay. Tell when you expect to arrive.
6. Answer all letters mentioned above.

COMPLETING CURRICULUM VITAE / CV / RESUME

Name:

Address:

E-mail:

DOB (date of birth):

Nationality:

Marital status: (single/married)

Siblings: (brothers/sisters)

Education:

Employment:

Previous Employment:

Present position:

Skills:

Accomplishments: (awards)

Hobbies and Interests:

References:

You may use the following web site: www.europass

ГРАММАТИЧЕСКИЕ ПОЯСНЕНИЯ К РАЗДЕЛАМ УЧЕБНОГО ПОСОБИЯ

МЕСТОИМЕНИЯ THE PRONOUNS

<i>I</i> — я;	<i>me</i> — меня, мне, мною;	<i>my, mine</i> — мой, моя, мое, мои;
<i>you</i> — ты, тебя, тебе, тобою вы, вас, вам, вами;		<i>your, yours</i> — твой, твоя, твое, твои; ваш, ваша, ваше, ваши;
<i>he</i> — он;	<i>him</i> — его, ему, им;	<i>his</i> — его;
<i>she</i> — она;	<i>her</i> — ее, ей, ею;	<i>hers</i> — ее;
<i>it</i> — он, она, оно;		<i>its</i> — его, ее;
<i>we</i> — мы;	<i>us</i> — нас, нам, нами;	<i>our, ours</i> — наш, наша, наше, наши;
<i>they</i> — они;	<i>them</i> — их, им, ими;	<i>their, theirs</i> — их

Местоимения *mine, yours, hers, ours, theirs* употребляются без существительных.

Некоторые местоимения имеют множественное число: *this* (этот) — *these* (эти), *that* (тот) — *those* (те)

Местоимение *some* (несколько) употребляется в утвердительных предложениях, *any* (несколько) — в отрицательных и вопросительных:

She has *some* apples. She has not *any* apples. Has she *any* apples?

СПРЯЖЕНИЕ ГЛАГОЛОВ *BE, HAVE, DO*

<i>I</i>	<i>am, have, do; was, had, did;</i>
<i>He</i>	<i>is, has, does; was, had, did;</i>
<i>She</i>	<i>is, has, does; was, had, did;</i>
<i>It</i>	<i>is, has, does; was, had, did;</i>
<i>We</i>	<i>are, have, do; were, had, did;</i>
<i>You</i>	<i>are, have, do; were, had, did;</i>
<i>They</i>	<i>are, have, do; were, had, did;</i>

СУЩЕСТВИТЕЛЬНЫЕ THE NOUNS

Множественное число существительных:

<i>leaf</i> — <i>leaves</i> ;
<i>bush</i> — <i>bushes</i> ;
<i>boy</i> — <i>boys</i> ;
<i>wife</i> — <i>wives</i> ;
<i>datum</i> — <i>data</i> ;
<i>phenomenon</i> — <i>phenomena</i> ;
<i>analysis</i> — <i>analyses</i> ;
<i>nucleus</i> — <i>nuclei</i> ;
<i>formula</i> — <i>formulae</i> .

<i>man</i> — <i>men</i>	<i>sheep</i> — <i>sheep</i>
<i>woman</i> — <i>women</i>	<i>swine</i> — <i>swine</i>
<i>child</i> — <i>children</i>	<i>deer</i> — <i>deer</i>
<i>ox</i> — <i>oxen</i>	<i>Chinese</i> — <i>Chinese</i>
<i>tooth</i> — <i>teeth</i>	<i>Japanese</i> — <i>Japanese</i>
<i>foot</i> — <i>feet</i>	<i>Swiss</i> — <i>Swiss</i>
<i>goose</i> — <i>geese</i>	<i>trousers</i>
<i>mouse</i> — <i>mice</i>	<i>scissors</i>
<i>louse</i> — <i>lice</i>	

Запомните, как образуется притяжательный падеж существительных:

Существительное с апострофом отвечает на вопрос: чей? (если 's не является сокращенной связкой). Такая форма указывает на принадлежность, обладание. Апостроф и 's' могут добавляться к существительным как в единственном, так и во множественном числе:

the girl's book — книга девочки

the girls' book — книга девочек

children's book — книга детей

ОБОРОТ *THERE IS / ARE*

Данный оборот используется для обозначения нахождения, наличия, существования чего-то, кого-то в определенном месте:

There is + существительное (в единственном числе)

There are + существительное (во множественном числе)

Если русские предложения начинаются с обстоятельства места (где?) — в английском языке употребляют *there is/are*. На русский язык этот оборот, как правило, не переводится.

Часто этот оборот соответствует русским глаголам: висеть, лежать, стоять:

There is a book on the table. — На столе лежит книга.

There is a picture on the wall. — На стене висит картина.

There is a bookcase in the corner. — В углу стоит книжный шкаф.

ПРИЛАГАТЕЛЬНЫЕ И НАРЕЧИЯ THE ADJECTIVES AND THE ADVERBS

Степени сравнения прилагательных и наречий:

high — higher — (the) highest

big — bigger — (the) biggest

dangerous — more dangerous — (the most) dangerous

good — better — (the) best

bad — worse — (the) worst

little — less — (the) least

many, much — more — (the) most

При сравнении в английском языке также используются следующие обороты:

than — чем

as ... as ... , so ... as ... — как..., так и...; так же..., как и... такой же..., как и...

the more ... the better ... — чем больше..., тем лучше...

МОДАЛЬНЫЕ ГЛАГОЛЫ И ИХ ЭКВИВАЛЕНТЫ THE MODAL VERBS AND THEIR EQUIVALENTS

Can = to be able to: I can speak English = I am able to speak English.

Я могу говорить по-английски.

I can run quickly = I am able to run quickly.

Я могу бегать быстро.

Could — форма прошедшего времени.

May = to be allowed to: You may do it = You are allowed to do it.

Вам можно сделать это. Вам разрешается сделать это.

May I come in? Am I allowed to come in?

Можно войти?

Might — форма прошедшего времени.

Must = to have to = to be to:

The student must do it = The student has to do it = The student is to do it.

Студент должен сделать это.

Should = to have to = to be to:

You should do it = You have to do it = You are to do it.

Вы должны сделать это.

SIMPLE TENSES

The Present Simple Tense употребляется со словами *always, usually, often, generally, sometimes, rarely, seldom, as a rule, every day (week, month, summer, year)* и т.п. для обозначения

- регулярного действия (*They usually write compositions*);
- вечных истин, пословиц и поговорок (*In winter it snows*);
- фактов действительности, которые остаются неизменными долгое время (*I study at the university*);
- запрограммированного будущего действия (*She meets him at 10 o'clock*).

The Past Simple Tense употребляется со словами *yesterday, last year (week, Monday), ago* и т.п. для обозначения

- действий, происходящих в прошлом (*She met him yesterday*).

The Future Simple Tense употребляется со словами *tomorrow, tonight, in a week, next week, in future* и т.п. для обозначения

- обычного действия в будущем (*He will go there with her*).

CONTINUOUS TENSES

The Present Continuous Tense употребляется со словами *now, at present, at the moment* и т.п. для обозначения

- действия в момент речи (*They are writing a composition now*);
- действия, которое длится некоторое время (*I am working at the university at present*);
- действия, запланированного на ближайшее будущее (*He is coming tonight*).

The Past Continuous Tense употребляется со словами *all evening yesterday, from... till the day before yesterday, all month last year* и т.п. для обозначения

- действия, происходившего в определенный момент или промежуток времени в прошлом (*She was having dinner at 6'clock yesterday*).

The Future Continuous Tense употребляется для обозначения

- будущего действия, когда указан момент или период времени (*They will be playing football this time tomorrow*);
- запланированного действия, которое обязательно произойдет при нормальном развитии событий (*She will be arriving on Sunday*).

PERFECT TENSES

The Present Perfect Tense употребляется со словами *already, ever, just, recently, never, yet, lately, since* для обозначения

- только что закончившегося действия (*He has just arrived*);
- действия, начавшегося в прошлом и продолжающегося до настоящего времени (*They have lived there since 1990*);
- действия, уже совершившегося, однако период времени еще не истек (*I have met him today*).

The Past Perfect Tense употребляется со словами *by 7 o'clock yesterday, when she came* и т.п. для обозначения

- прошедшего действия, которое закончилось к какому-то моменту в прошлом (He *had read* the article by 7 o'clock yesterday);
- прошедшего действия, которое произошло раньше какого-то другого прошедшего действия (He *had read* the article when she came).

The Future Perfect Tense употребляется со словами *by 7 o'clock tomorrow, by the 9th of April* и т.п. для обозначения

- действия, которое закончится в определенный момент в будущем (He *will have read* the article by 7 o'clock tomorrow).

PASSIVE VOICE

Чтобы показать, кем или чем выполняется действие, употребляются предлоги:

- *by* с одушевленными существительными (The article *was read* by him);
- *with* с неодушевленными существительными (The letter *was written* with the pen).

НЕЛИЧНЫЕ ФОРМЫ ГЛАГОЛА VERBALS

Синтаксические функции форм инфинитива (*the Infinitive*) и герундия (*the Gerund*); способы их перевода на русский язык:

a) подлежащее

To read is useful.

Чтение/читать — полезно.

Reading is useful.

Чтение/читать — полезно.

б) составная часть сказуемого

We began to read this book.

Мы начали читать эту книгу.

We began reading this book.

Мы начали читать эту книгу.

в) дополнение

I like to read this book.

Я люблю читать эту книгу.

I like reading this book.

Я люблю читать эту книгу.

г) определение

This is the book to be read.

Это — книга, которую нужно прочитать.

I have the wish of reading this book.

У меня есть желание почитать эту книгу.

д) обстоятельство

To know English well you should study hard.

Чтобы знать английский язык хорошо, вы должны усердно учиться.

After reading this book I returned it to the library.

После чтения этой книги/После того как я прочитал/Прочитав эту книгу, я вернул ее в библиотеку.

I can't explain it without reading this book.

Я не могу объяснить это, не прочитав этой книги.

Формы инфинитива переводятся на русский язык следующим образом:

1. Неопределенно-личной формой глагола, которая отвечает на вопрос «Что делать?»:

To read is useful.

Читать — полезно.

2. Существительным:

To read is useful.

Чтение — полезно.

3. Придаточным определительным с союзным словом «который»:

This is the book to be read.

Это — книга, которую нужно прочитать.

4. Придаточным цели с союзом «чтобы»:

To know English well you should study hard.

Чтобы знать английский язык хорошо, вы должны усердно учиться.

Формы герундия переводятся на русский язык следующим образом:

1. Существительным:

Reading is useful.

Чтение — полезно.

2. Неопределенной формой глагола:

Reading is useful.

Читать — полезно.

3. Двупричастием, отвечающим на вопрос «Что делаю?», «Что сделал?»:

After reading this book I returned it to the library.

Прочитав эту книгу, я вернул ее в библиотеку.

4. Придаточным предложением:

After reading this book I returned it to the library.

После того как я прочитал эту книгу, я вернул ее в библиотеку.

5. Существительным с предлогом:

After reading this book I returned it to the library.

После чтения этой книги я вернул ее в библиотеку.

Синтаксические функции форм причастия настоящего (Participle I) и прошедшего (Participle II) времени в предложении; способы их перевода на русский язык:

1) составная часть сказуемого

He is translating the text.

Он переводит текст.

He is writing a composition.

Он пишет сочинение.

The text is translated by him.

Текст переводится им.

The composition is written by him.

Сочинение пишется им.

б) *определение*

The boy *writing* a composition is my student.
Мальчик, *пишущий* сочинение, — мой студент.

The composition *written* by my student is nice.
Сочинение, *написанное* моим студентом, замечательное.

The *written* composition is nice.
Написанное сочинение замечательное.

в) *обстоятельство*
(When, while) *reading* this book I made some notes.
Читая эту книгу, я делал пометки.

Being asked to answer the questions I did it at once.
Когда меня попросили ответить на вопросы, я сделал это сразу же.

Having written a composition he went to bed.
Написав сочинение, он пошел спать.

Having been formed the council began to function.
Будучи сформированным, совет начал функционировать.

When *translated* into Russian this book was read by my students.
Когда эту книгу *перевели* на русский язык, она была прочитана моими студентами.
Though not *prepared* very well he could answer that question.
Хотя он был не очень хорошо *подготовлен*, он смог ответить на этот вопрос.
If *written* well the composition will be read to the students.
Если сочинение будет написано хорошо, оно будет прочитано студентам.

Формы причастия настоящего времени (Participle I) переводятся на русский язык следующим образом:

1. Причастием с суффиксами – аш/яш, – уш/юш:
The boy *writing* a composition is my student.
Мальчик, *пишущий* сочинение, — мой студент.
2. Деепричастием, отвечающим на вопрос «Что делаю?», «Что сделаю?»:
(When, while) *reading* this book I made some notes.
Читая эту книгу, я делал пометки.
3. Придаточным предложением:
(When, while) *reading* this book I made some notes.
Когда я читал эту книгу, я делал пометки.
4. Сущестительным с предлогом:
Having been formed the council began to function.
После создания совет начал функционировать.

Формы причастия прошедшего времени (Participle II) переводятся на русский язык следующим образом:

1. Причастием с суффиксами –нн/-енн/-анн/-т/-вш/-ш/-м/-ом/-ем/-им-:
The composition *written* by my student is nice.
Сочинение, *написанное* моим студентом, замечательное.
2. Придаточным предложением:
If written well the composition will be read to the students.
Если сочинение будет написано хорошо, оно будет прочитано студентам.

АНГЛО-РУССКИЙ СЛОВАРЬ КОНТЕКСТУАЛЬНЫХ ЗНАЧЕНИЙ АКТИВНОЙ ЛЕКСИКИ

a — adjective — прилагательное

adv — adverb — наречие

conj — conjunction — союз

n — noun — существительное

pl — plural — множественное число

pp — past participle — причастие прошедшего времени

predic. — predicative — предикативное употребление

prep — preposition — предлог

pron — pronoun — местоимение

v — verb — глагол

— тильда — знак, заменяющий заглавное слово словарной статьи

А

ability n — способность

able a — способный

abroad adv — за границе

acceleration n — ускорение, разгон;

набор скорости

access n — доступ, подход

accessible a — доступный,

достижимый

accommodate v — размещать,

поместить (предмет)

according to prep — согласно, в

соответствии с

accordingly adv — соответственно, в

соответствии; таким образом,

потому

achieve v — достигать

across prep — через

activity n — деятельность

adult n — взрослый

advantage n — преимущество

advise v — советовать

against prep — против, на

age n — возраст; век; период, эпоха

aid v — помогать; *n* —

вспомогательное средство или

прибор

allow v — позволять, разрешать

alloy n — сплав

almost adv — почти; едва не

along prep — вдоль

also adv — тоже, также

although conj — хотя

among prep — среди

amount n — количество

answer v — отвечать

application n — применение

arbour n — беседка

area n — площадь, пространство

arrange v — располагать, приводить

в порядок

arrangement n — схема,

расположение; технологическая

подготовка производства,

построение

article n — статья

as adv — как, как например; ~ well

также

as... as... conj — как..., так и...

assemble *n* – собирать; монтировать
 associate professor – доцент
 attach *v* – прикреплять, присоединять
 attend *v* – посещать
 automotive *a* – автомобильный
 available *a* – доступный, имеющийся в наличии
 axle *n* – ось

В

bear *v* (bore, borne) – носить
 behind *prep* – за, позади
 below *adv* – ниже, внизу; *prep* – ниже, под
 between *prep* – предлог
 bind *v* (bound) – связывать
 blend *v* – смешивать
 body *n* – кузов
 boot *n* – багажник, багажное отделение
 both *pron* – оба
 both... and... *conj* – как ... , так и ...
 brass *n* – латунь
 brake *n* – тормоз
 break *v* (broke, broken) – ломать(ся), разбивать(ся)
 brittle *a* – хрупкий
 broad *a* – широкий
 bulky *a* – массивный, большой, громоздкий
 bump *n* – ухаб
 buy *v* (bought) – покупать
 by *prep* – у, при, около; к

С

capacity *n* – емкость, мощность
 carbon *n* – углерод
 carefully *adv* – внимательно, осторожно
 carpenter *n* – плотник
 carriage *n* – перевозка, транспорт
 cast iron *n* – чугун
 chassis *n* – рама, к которой крепятся агрегаты силовой установки, ходовой части и кузов; рама с

установленными агрегатами ходовой части; шасси, на котором смонтированы агрегаты силовой установки и ходовой части (но без кузова)
 change *v* – менять(ся)
 cheap *a* – дешевый
 chemicals – химические препараты
 choose *v* (chose, chosen) – выбирать
 clay *n* – глина
 clutch *n* – сцепление
 collapsible *n* – сминающийся; угибающийся, складной, выдвижной
 colour *v* – красить
 combine *v* – объединять(ся), сочетать(ся)
 combustion *n* – горение, возгорание; сжигание, процесс окисления;
 internal ~ engine двигатель внутреннего сгорания
 common *a* – общепринятый, распространенный
 competition *n* – соревнование
 compartment *n* – отделение, купе
 composite *n* – смесь, композиционный материал, композит
 composition *n* – сочинение
 compound *n* – соединение
 conductivity *n* – проводимость
 conductor *n* – проводник
 consider *v* – полагать, считать
 considerable *a* – значительный; важный
 consist of *v* – состоять из
 constituent *n* – составная часть
 consumption *n* – потребление, затрата, расход
 contain *v* – содержать в себе, вмещать
 contribute *v* – делать вклад
 convertible *a* – обратимый, изменяемый; заменимый

cool *v* — охлаждать
 copper *n* — медь
 coupe *n* — закрытый двухдверный
 кузов
 crankshaft *n* — коленчатый вал
 create *v* — создавать, творить;
 производить

D

data *n* — данные; информация
 datum *n* (*pl* data) — данные,
 информация
 degree *n* — степень; Bachelor ~
 степень бакалавра
 department *n* — отделение, full-time ~
 полное отделение, part-time ~
 вечернее отделение, extra-mural ~
 внешнее отделение
 describe *v* — описывать
 design *v* — создавать, задумывать;
 проектировать; конструировать
 development *n* — развитие
 device *n* — устройство; прибор;
 аппарат
 diesel *n* — дизельный двигатель;
 транспортное средство на
 дизельной тяге (автомобиль с
 дизельным двигателем, тепловоз)
 differ *v* — различать(ся)
 different *a* — различный
 differential *n* — дифференциал
 distinguish *v* — различать
 distribute *v* — распределять
 divide *v* — делить(ся), разделять(ся)
 domestic *a* — внутренний, ~ industry
 отечественная промышленность
 drawback *n* — недостаток
 drive *v* (drove, driven) — приводить
 в движение; four-wheel ~ полный
 привод; front-wheel ~ передний
 привод; ~ lines ходовая часть; rear-
 wheel ~ задний привод
 drop *v* — падать; опускаться
 dual *n* — двойной, дублированный
 durable *a* — кованный, тягучий

due to *prep* — благодаря
 during *prep* — в течение

E

e.g. — например
 each *pron* — каждый, всякий; ~
 other друг друга
 early *adv* — рано; на начальной
 стадии; *a* — ранний
 easy *a* — легкий
 eat *v* (ate, eaten) — есть, кушать
 education *n* — образование
 either ... or ... *conj* — или ... или ...
 element *n* — элемент
 embrace *v* — включать, содержать,
 охватывать
 enable *v* — давать возможность
 enclose *n* — заключать
 encompass *v* — содержать, включать,
 заключать (в себе)
 engine *n* — двигатель, мотор
 engineering *n* — техника,
 инженерное дело, проектирование,
 машиностроение; mechanical ~
 машиностроение; ~ materials
 конструкционные материалы
 enlarge *v* — увеличивать(ся)
 epoch *a* — эпоксидный
 establish *v* — устанавливать,
 основывать
 estate *n* — имущество; ~ car легковой
 автомобиль с кузовом «универсал»
 etc.(et cetera) лат. *adv* — и так далее
 exam *n* — экзамен
 example *n* — пример; for ~
 например
 exhibition *n* — выставка
 exist *v* — существовать
 extend *v* — простирасть(ся);
 вытягивать
 extra *a* — добавочный,
 дополнительный
 extremely *adv* — чрезвычайно,
 крайне

F

fabric n — материал; структура
famous a — известный
ferrous a — железистый, ~ *metals*
 черные металлы; non~ *metals*
 цветные металлы
fibre n — волокно
fibreglass n — стекловолокно
fit v — приспособлять(ся);
 устанавливать, монтировать
flexible n — гибкий
floor n — пол
following a — следующий
for prep — для, в течение
found v — основывать
four-stroke cycle — четырехтактный
 цикл
frame n — рама; *v* — вставлять в
 рамку
free a — свободный; ~ *education*
 бесплатное образование
frequently adv — часто
fuel n — топливо, горючее
fulfil v — выполнять
future n — будущее; *a* — будущий

G

gasoline n — бензин, газолин
gear n — привод, зубчатая передача
gearbox n — коробка передач
generally adv — обычно, как правило
goods n — товары
govern v — управлять
government n — правительство

H

handle v — управлять
handling n — управление
hard a — твердый, жесткий
hatchback n — легкой автомобиль
 с двухобъемным кузовом и задней
 дверью, открывающей доступ к
 багажному отделению
heat n — нагрев, жар; *v* — нагревать
heavy a — тяжелый
higher school — высшая школа

how adv — как
how many (much) — сколько
however adv — однако
human n — человек, человеческое
 существо
hydrogen n — водород

I

improve v — улучшать
include v — включать
increase v — увеличивать(ся)
indispensable a — необходимый,
 незаменимый, очень нужный
inert a — инертный, неактивный
influence v — оказывать влияние,
 влиять
inorganic a — неорганический
institute n — институт
institution n — учреждение,
 заведение
insulator n — изолятор,
 непроводник
integral a — полный, цельный
intend v — намереваться
internal a — внутренний
intrude v — вторгаться
involve v — включать в себя (*in*)
iron n — железо
isolate v — изолировать, отделять

J

job n — работа, ~ *security* гарантия
 занятости
join v — соединять(ся)

K

keep v (kept) — держать, хранить

L

last a — последний, прошлый
layout n — расположение, план
lead n — свинец
lecture n — лекция
lesson n — урок
level n — уровень
light a — светлый, легкий
linkage n — рычажный механизм;
 связь, соединение

M

N

net *n* — сеть
 newspaper *n* — газета
 newsstand *n* — газетный киоск
 note *v* — замечать, упоминать
 nowadays *adv* — в наше время, в
 наши дни, теперь
 number *n* — число, цифра; *a ~ of*
 некоторое количество
 numerous *a* — многочисленный

O

occasional *a* – случайный
 occupant *a* – обитатель, житель
 once *adv* — (один) раз; at ~ сразу
 only *adv* — только, исключительно
 operate *v* – работать; действовать,
 функционировать, управлять
 opinion *n* — мнение
 over *prep* — над; *adv* — выше
 own *a* — собственный
 oxygen *n* – кислород

P

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present *n* — настоящее время; *a* — теперешний, настоящий; *v* дарить, представлять
 prime *a* — основной, важнейший
 produce *v* — производить
 property *n* — собственность, свойство
 provide *v* — снабжать, обеспечивать (with)
 pull *v* — тянуть, тащить
 pump (tap) *v* — выкачивать
 pure *a* — чистый
 purpose *n* — цель

Q

quantity *n* — количество, величина;
 physical — физическая величина

R

rather *adv* — довольно
 rear *n* — задняя сторона
 receive *v* — получать
 reduce *v* — уменьшать
 refer *v* — относиться
 reinforce *v* — усиливать, укреплять
 relatively *adv* — относительно, сравнительно
 relevant *a* — уместный, относящийся к делу
 reliability *n* — надежность; прочность
 remove *v* — удалять; убирать
 repair *v* — ремонтировать, чинить
 representative *n* — представитель
 require *v* — требовать
 research *v* — исследовать
 resin *n* — смола
 resist *v* — сопротивляться, противостоять
 respond *v* — отвечать
 responsible *a* — ответственный
 rigid *a* — жесткий, негнущийся
 road *n* — дорога, путь, шоссе
 roof *n* — крыша
 rubber *n* — резина, каучук
 rust *v* — ржаветь

S

safe *a* — безопасный
 safety *n* — безопасность
 saloon *n* — легковой автомобиль с кузовом седан
 science *n* — наука
 scientific *a* — научный
 scientist *n* — ученый
 secondary *a* — средний (об образовании)
 semi-detached — дуплекс
 send *v* (sent) — посылать
 separate *v* — отделять(ся), разделять(ся)
 separate *a* — отдельный; обособленный; разрозненный, разъединённый
 serve *v* — служить
 shaker *n* — вибратор
 shaft *n* — вал, ось; propeller — карданный вал; drive — ведущий вал; half — полось
 shape *n* — форма, очертание; *v* — придать форму
 shed *n* — сарай, ангар
 shell *n* — оболочка, кожух
 shock *n* — удар, толчок; ~ absorber — амортизатор
 should *v* (should) — должен
 since *prep* — с; *conj* — с тех пор как, так как
 skill *n* — умение, навык; искусство, мастерство
 society *n* — общество
 solve *v* — решать
 some *pron* — несколько
 sometimes *adv* — иногда
 source *n* — источник
 space *n* — космос, космическое пространство, пространство; *v* ~ out — расставлять с промежутками
 speed *n* — скорость
 spring *n* — пружина
 staff *n* — штат служащих

stainless *a* — устойчивый против коррозии; ~ steel нержавеющая сталь
 steel *n* — сталь
 steering *n* — управление; wheel ~ рулевое управление; ~ linkage система рычагов, тяг и шарнирных соединений рулевого привода
 stiff *a* — негибкий; жесткий
 still *adv* — все еще
 strong *a* — сильный
 subsequent *a* — последующий
 sufficient *a* — достаточный
 suit *v* — годиться; соответствовать, подходить
 suitable *a* — подходящий, соответствующий
 support *v* — поддерживать; *n* — поддержка
 sure *a* — уверенный
 suspension *n* — подвеска

Т

take *v* (took, taken) — брать, занимать, отнимать; to ~ care of заботиться; to ~ part (in) принимать участие; to ~ place случаться, происходить; to ~ up принимать, брать за что-л.
 tap *v* — выкачивать
 tend *v* — иметь тенденцию; вести в определенном направлении
 tenile — растяжимый, растягивающий, прочный на растяжение
 term *n* — термин; период
 than *conj* — чем
 that *pron* — тот; *conj* — что
 there *n* — там
 therefore *adv* — поэтому, следовательно
 thermal *a* — термический, тепловой
 thermoplastics *n* — термопласт (материал)

thermoset *n* — термореактивная пластмасса
 these *pron* — эти
 this *pron* — этот
 those *pron* — те
 though *adv* — хотя
 through *prep* — через, сквозь
 tin *n* — олово
 tire *n* — шина
 to *prep* — к, в, на
 tool *n* — рабочий инструмент, орудие
 transmission *n* — передача; трансмиссия
 transmit *v* — передавать, отправлять
 transport *n* — транспорт, средство сообщения; перевозка, транспортировка
 trunk *n* — багажник
 tungsten *n* — вольфрам
 turn *v* — поворачивать(ся); ~ away отворачиваться, ~ into превращаться
 two-stroke cycle — двухтактный цикл
 tyre *n* — шина

U

unitary *a* — единственный
 unite *v* — соединять(ся)
 until *prep* — до; *conj* — (до тех пор) пока (не)
 use *v* — использовать, применять, употреблять
 useful *a* — полезный
 useless *a* — бесполезный
 usual *a* — обычный
 usually *adv* — обычно

V

valve *n* — клапан, вентиль, затвор
 various *a* — различный, разный
 vary *v* — менять(ся), поменять(ся); различаться

vehicle *n* — средство
передвижения, перевозочное
средство
via *prep* — через
vocational *a* — профессиональный

W

watch *v* — наблюдать, смотреть
weight *n* — вес
well *adv* — хорошо; as ~ также
what *pron* — что
wheel *n* — колесо; ~ spin буксование
колеса; ~ steering рулевое колесо;
when *adv, cj* — когда, в то время
как
where *adv, cj* — где, куда
while *cj* — в то время как
who *pron* — кто
whole *a* — весь, целый
whom *pron* — кого, кому
whose *adv* — чей
why *adv* — почему
wide *a* — широкий
with *prep* — с
without *prep* — без
withstand *v* (withstood) —
противостоять, выдерживать
worth *a predic.* — стоящий,
заслуживающий внимания

Y

yesterday *adv* — вчера

Список

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